TRIP/TECHNICAL REPORT NO. UKR-

ASSESSMENT OF HEALTH FINANCING TOOLS UNDER ALTERNATIVELY DEFINED SCENARIOS OF SOCIAL MEDICAL INSURANCE IN UKRAINE

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EXECUTIVE SUMMARY

The study presented in this report was conducted in May 1997. It was focused on the issues of resource generation for the health care sector of Ukraine. The study responded to the need of the MoH of Ukraine for setting and testing parameters of a diversified system of health financing, with five economic institutions distinguished as potential contributors for SMI.

The *immediate* financial roles of the payors – in terms of who pays to cover whom – are defined in the Draft Health Insurance Law, recently submitted by the MoH (provisions 4 and 5) to the Ukrainian legislature. It is the *indirect* financial roles, however, that need to be identified and assessed in order to enable all the payors to comply with their financial responsibilities. Such roles were proposed under Scenarios 2, 3, and 4, designed as part of this study: reallocations from employers and the governments will back up the social insurance funds and the public sector employers, both unlikely to have sufficient funds to contribute for SMI on their own.

Since important *contributory* roles may be assigned to the individuals – under self-insurance and co-insurance arrangements – a mechanism of tax transfers to the households was proposed to alleviate the burden of SMI contributions on the households in low-to-lower middle income groups. A combination of exemptions from SMI contributions and tax credits was recommended as preferred mechanism.

A mechanism of matching fund allocations was offered to the governments as a statistical tool of increasing the aggregate health care expenditure in an SMI-driven setting.

The conducted study allowed to conclude that a multi-payor system of SMI may be factored in the existing network of financial flows and internalized by every participating economic institution, if two out of five are subsidized by the employers and/or the governments at the amount of their contributions for SMI. This, however, raises the issue whether those two institutions – namely the public sector employers and the social insurance funds -- should become involved in SMI contributions at all.

Apart from the quantitative evaluation of the SMI-driven health financing mix, the latest draft SMI law was reviewed at the request of USAID/Kiev, most of the criticisms being focused on SMI financing mechanisms, excessive control proposed by the MoH for itself, and omissions from the original draft.

It is recommended that further deliberations on legal and economic mechanisms of health financing reforms and SMI implementation should be put into a more interdisciplinary setting, such as a task force, representing the Ministry of Finance, the Ministry of Labor, the MoF, the Insurance Supervisory Committee; the State Tax Inspection, Social Insurance Funds, associations of entrepreneurs and self-employed, and oblast administrations.

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1. BACKGROUND

The *Supreme Rada* -- Ukrainian legislature, and the Ministry of Health of Ukraine (MoH) requested technical assistance with evaluating financial roles and potential of the main payors in the emerging system of social medical insurance (SMI). This study was conceived to evaluate feasibility of selected legal provisions relating to SMI-based health financing. The provisions were proposed for the draft national health financing reform law. The draft was prepared in its initial version in November 1996 by an MoH-based task force, coordinated by this consultant. Since then the law underwent a number of changes. Some of the important arrangements were omitted. Section 7 reviews those changes and highlights some of the inconsistencies that emerged during the revision process at the MoH.

2. GOALS AND OBJECTIVES

The goal of this study is to design and assess a basic set of scenarios of who and how would provide funding for personal health services in a SMI setting. Particularly,

1. To identify alternative pathways (scenarios) of transition from a *single-pipe* system of health financing existing at present, to a more diversified system;
2. To project volume and composition of health financing under each scenario;
3. To set financing (contribution) rates for SMI and evaluate each scenario for its impact on the budgets, financial status of businesses, and household income;
4. To propose mechanisms that would be able to attenuate financial burden for key contributors;
5. To compare scenarios and recommend legal provisions to back up desirable mechanisms of transition to SMI.

A controlled parameter in the study is a per capita amount of spending that must be secured for each citizen to ensure the baseline amount of personal health care expenditure.

Concurrent with the outlined goals, the following objectives are targeted by the analyses:

Qualitative and statistical description of the baseline scenario, i.e., (i) demographic composition: a break-down of the population by socio-economic status and eligibility for a particular source of MHI coverage; (ii) health financing mix, i.e. a break-down of health expenditure by broadly defined source and category of spending; (iii) age/sex risk-adjustors as a determinant of the per capita health resource need; (iv) budget-neutral spending on SMI health services by population category and source of funding.

SMI financial pressure on various institutional agents should be adjusted for alternatively set assumptions relating to the following: (i) primary source of the Social Fund contributions for MHI (internally generated funds, versus subsidies through earmarked payroll tax, or subsidies from budget general revenue); (ii) rate of co-insurance; (iii) mechanism of cash and tax transfers to households; (iv) mechanism of matching fund allocation from general revenue of the budget.

As an output from the outlined simulations, the study generates MHI premiums by major contributor, and relates those premiums to economy-, sector, and industry-wide payroll, general revenue of the budget, and household incomes. Also, the shares of main institutional contributors in the aggregate health financing are estimated by scenario.

3. CONCEPTUAL FRAMEWORK OF TRANSITION TO SMI

3.1 Health Financing Roles of Key Institutions

An optimal mechanism of health care resource generation implies that all potential sources of funding are identified, evaluated, activated, and integrated into a fund-flow mechanism with as little distortion as possible for any particular payor and the economy at large.

In the context of Ukraine's SMI, five economic institutions may be distinguished as potential contributors: (1) governments, (2) public sector employers, (3) business sector employers, (4) social insurance funds, (5) households. Each one may play direct and/or indirect roles in resource allocation. *Direct* allocations are those that provide funding directly for the health care sector. *Indirect* allocations are intended for direct payors to facilitate their contributions to the health care sector.

Chart 1. Potential Contributors for Social Medical Insurance in Ukraine

	Direct (Final) Payors	**Indirect (Primary) Payors**
Governments	+	+
Public Sector Employers	+	--
Business Sector Employers	+	+
Social Insurance Funds	+	--
Households	+	--

Governments

The role of the Governments in Ukraine as a tool of national income redistribution has shrunk considerably in the post-Soviet period. At present it is likely to be much lower than in such countries as the Netherlands, Norway, Sweden, France, and Italy, where central

governments alone spend more in percent of GDP than all governments in Ukraine[1]. In 1996, estimated 37.44 percent of Ukraine's GDP accrued to the consolidated national budget (the latter is the aggregate of central and local budgets). Coincidentally, this neatly matches the 37.41 percent of *all governments* revenue-to-GDP ratio in the United States as reported for 1991[2] (more recent data were not available at the point of writing this report).

Seeking a more restrictive approach to its spending strategy, the governments have shed financial responsibilities for most cash benefit programs by moving them off-budget and entrusting them to special-purpose social insurance funds. The health care sector may be the next target for "fiscal divestiture". The Ministry of Finance accepts the idea of SMI as long as SMI-based models of health financing feature the reduction of the government share in public/private mix. There is a concern, however, that by shifting the health care bill to other institutional agents, the government may place an excessive burden on them which will indirectly impact on general revenue of the budget. Current study gives an idea of such indirect effects. Particularly, it assesses tax expenditures that the budgets will have to bear in order to attenuate financial pressure on SMI-contributing households.

Under any scenario, the government will continue to play the central and multifaceted role in the national health financing. The following menu of the government's financial functions may be considered in a perspective of SMI:

1. Direct contributions for SMI to the benefit of designated non-employed populations.
2. Cash transfers to the public sector (on-budget-funded) employers to compensate them for the new payroll tax, earmarked for SMI.
3. Cash transfers to selected social insurance funds to enable them to pay for their targeted populations.
4. Tax transfers to business employers: this type of mechanisms is disabled under the current round of simulations but may be brought into focus, once the Ministry of Finance shows at least some acceptance of health sector-related tax expenditure.
5. Tax transfers to households: tax credit and exemptions are played out as two out of several possible options.

Employers

Public sector employers, on the one hand, and business sector employers, on the other, would have to be treated differently from the standpoint of their ability to provide SMI coverage for their employees.

Public sectors are comprised of health care, welfare, education, culture and arts, R & D, general government administration. Listed industries account for 30.2 percent of the labor

[1] *Assessement is based on World Development Report 1993. Investing In Health. World Development Indicators: Oxford, etc.*: Oxford Univ. Press, 1993: 261, and assessed GNP/GDP differentials.
[2] Statistical Abstract of the United States, 1993. The National Data Book.,Wash.,DC: Gov.Print.Off.: 442.

force, if roughly estimated employment in the military, police, and security is included.[3] By definition of the public sectors, they are funded from general revenue of the budget. Cost-recovery in respective institutions does not exist and, largely, is precluded by law. To be able to factor SMI payroll tax in the costs, public sector employers would have to rely on the government's agreement to procure their services at higher rates. Such agreement will be tantamount to the government's willingness to subsidize public sector employers at the amount of their contributions for SMI.

Business sectors account for 45.3 percent of the labor force. Economy-wide profit margin was reported in 1996 at 10.9 percent. Accrual basis accounting, however, should not overshadow the problem of huge and long payment arrears: profitability in the books coexists with acute shortage of cash flow in real life, making too many businesses bend over the edge of insolvency. With the GDP currently at 45 percent of its 1991 level, the overall financial status of business sector employers may be presumed severely depressed.

An important issue in this context is how to limit employer-based eligibility for SMI benefits, particularly whether part-timers should be disqualified and how the threshold between full- and part-time employment should be established for the purposes of SMI coverage. In the current study this issue was not addressed, in part because the information was not made available to the consultant on industry-specific employment numbers in physical persons versus full time equivalence. From the consultant's experience in the NIS countries of Central Asia a major problem may be expected with *Agriculture*. It is not uncommon in the NIS that the number of physical persons employed in the collectivized agricultural sector exceeds by more than twice the FTE employment. A recommendation worth to examine, may be to limit employer-based SMI coverage to those employed at no less than 50 percent of the annual work time.

The Social Insurance Funds

In November 1996, the MoH-based task force, including this consultant as its coordinator, developed a draft SMI Law. Later on, it was amended in two different ways, respectively, by MOH and insurance companies, and circulated as two independent documents. In both versions, however, the provision remained, setting forth that the *Pension Fund* shall contribute for the retirees, while the *Employment Fund* shall contribute for the registered unemployed. At present, there is a conventional knowledge, supported by the funds themselves and, supposedly evidenced by their annual statements, that off-budget social insurance finance is in the red. Therefore, SMI may not be accommodated out of the funds' operating revenue nor reserves.

It is not known whether independent audit has ever been conducted at any of the two funds. Annual financial reports remained unavailable to the consultant. Since direct assessment was not possible, the consultant had to take it for granted that the funds are too poor to be

[3] The definition of the labor force used in the context of this report, thus, does not match the BLS definition, whereby the military would be excluded as part of the institutional population.

engaged in SMI premium payments. Therefore, in most scenarios they are backed up with transfers from other institutions.

The *Social Insurance Fund* of Ukraine may be considered as another potential contributor to the health care sector. This institution holds funding for sick-leave and maternity benefits, and also maintains a wide network of recreation facilities, owned by the labor unions. In the 90s the ownership status of those facilities might have changed: some of them would have been quietly privatized, or transferred under municipal control, or have evolved into joint ventures of the labor unions with various, not easily identifiable partners.

The Social Insurance Fund could contribute to the health care sector in two important ways:

In-kind, by ceding some of its viable facilities to the health care sector in order to turn them into skilled-nursing facilities and rehabilitation centers. Post-hospital and nursing care is a missing component in the post-Soviet health care delivery systems. It is already in demand and will become increasingly so, as the system will be awakening to cost-containment incentives.

In-cash, by pooling sick-leave insurance with insurance for general medical risks, i.e. SMI reimbursement of health care costs. This could improve coordination of various benefits associated with the disease and, importantly, make the surplus of unused sick-leave monies available for prevention and other activities in the health care sector.

None of the options, related to the Social Insurance Fund, has been seriously considered so far in the context of SMI legislation. Despite a persistent feeling, shared by most national health policy-makers, that there should be ways of putting the social insurance contributions at work for the health care sector, practical steps in that direction are impeded by a pessimistic feeling that the labor unions will not easily give up their financial powers. Some mutually beneficial deal would have to be negotiated between the national SMI Fund and the national Social Insurance Fund to get the latter pool its revenues and assets with the SMI system. This might be an 'umbrella' agreement, endorsing the development of more specific arrangements on the oblast level, customized to the needs and opportunities of each specific territory. Designing and facilitating such collaborative agreement should be considered as a politically relevant and professionally creative objective for technical assistance, and may lead to an unprecedented development in the NIS health care reforms.

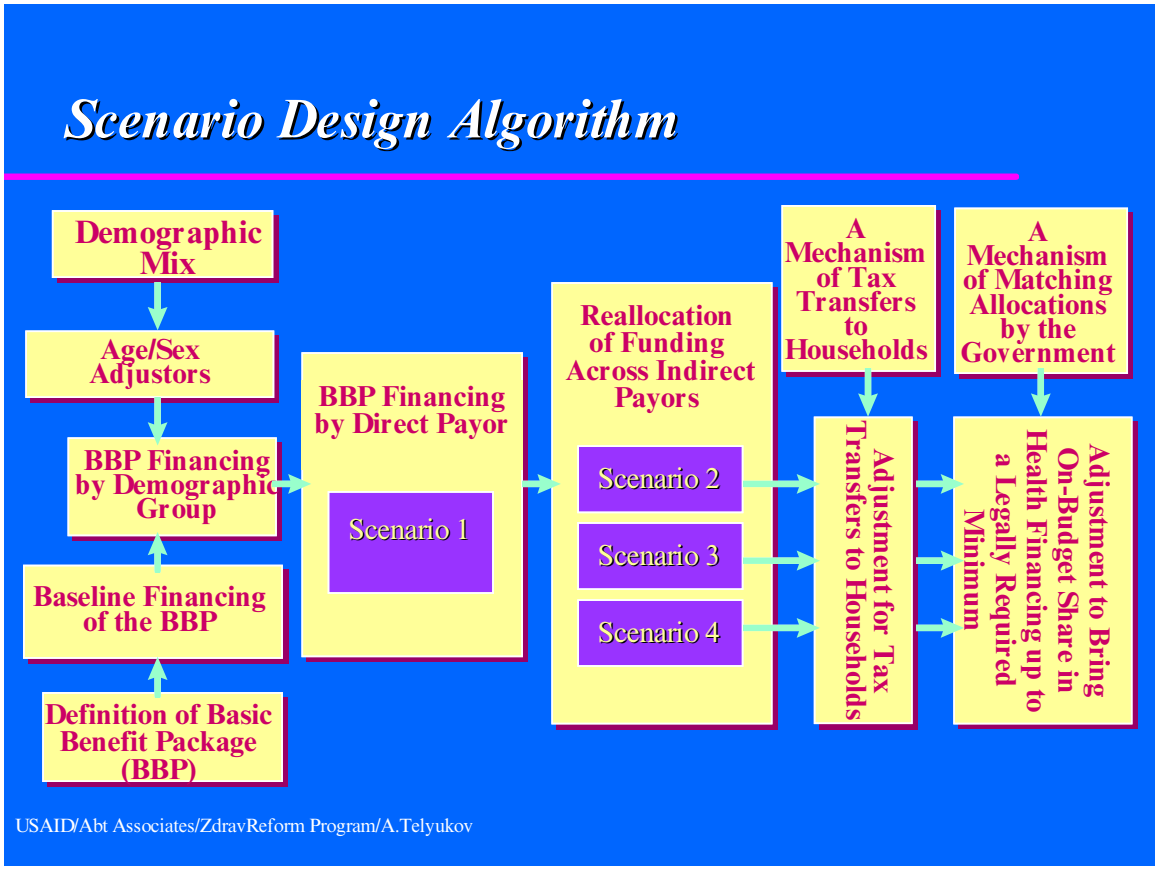
Households will have a two-pronged connection to SMI financing: self-insurance and, under one of the scenarios, co-insurance. Individual contributions will touch upon a significant part of the population: from 14.4 percent to 50.1 percent, according to various approaches to SMI coverage. Distributional (relating to impact on income distribution) effects of these co-payments will be carefully monitored throughout the simulations in order to preempt negative impact on equity.

Among populations subject to self-insurance there will be a *residual* category of 'the individuals with unspecified sources of income'. The reason for distinguishing such group of people is to encourage to buy insurance policies, people who may not be registered for general taxation purposes. Put differently, the "no-questions-asked" attitudes will be guaranteed to individuals who would want to come self-insure for whatever reason they may have to do so.

3. 2 An Algorithm for Scenario Design

A variety of scenarios was designed, using the algorithm, presented in Chart 2.

Chart 2



The algorithm includes four basic components: A. Development of background assumptions and information for scenario modeling. B. Design of baseline and alternative scenarios. C. Design and testing of *reconciliatory (adjustment) mechanisms* to adjust *crude* scenarios for certain exogenous factors. D. Reconciliation (adjustment) of alternative scenarios.

A. Background Assumptions and Information

The following important questions should be thought over at this stage:

1. Which population categories should be tracked to ensure comprehensive coverage?
2. Does per capita demand for health care resources vary by category of the insured?
3. Who pays for each category of the insured?
4. What services should be paid for under SMI, or, put differently, included in the SMI basic benefit package?
5. What does it cost in current terms to provide health coverage for each category of the insured and for the range of services included in the SMI basic benefit package?

B. Baseline and Alternative Scenarios

Baseline scenario is shaped up by responses to the above outlined questions. Alternative scenarios depart from the baseline scenario by challenging it in regard of *question 3*: Who pays for whom? The main differences among the scenarios have to do with the primary sources of contributions for SMI. Particularly, a variety of scenarios is created by shifting financing roles of the employers and the governments.

C. Adjustment Mechanisms

Those mechanisms solve two problems: (i) To alleviate financial burden on individuals (households) who have to pay for SMI. (ii) To take advantage of additional SMI-related sources of funding in order to increase the aggregate amount of national health expenditure. The first mechanism generates tax transfers for individual payors to SMI. The second mechanism ensures matching allocations by the government to the national health budget.

D. Adjustment of Alternative Scenarios

A variety of adjustments is made in each alternative scenario, while utilizing the above outlined reconciliatory mechanisms.

3.3 Principles and Scope of SMI

The SMI in Ukraine seeks to adhere to a set of basic principles. Each principle implicates certain decisions with respect to resource allocation, thus, impacting on the system of health financing. The statement of principles and the choice of associated mechanisms are important for evaluation of that impact and, consequently, for setting SMI financing rates.

Universal coverage. The system of health financing, sought to be created in Ukraine stems from the concept of *national* health insurance or, in terms practiced in Germany, *social*

medical insurance. Comprehensive coverage of resident population thus becomes the basic requirement for SMI-based health financing. Eleven population categories are distinguished in the national demographic mix by source of coverage. Their definition and assignment to a particular contributor are set forth in the MoH Draft SMI Act and are used throughout this study.

Limits to SMI by type of spending and health care. SMI provides *recurrent* funding for *designated personal health services*. It, thus, covers the national health care budget net of public health programs, health administration overheads, fixed investment, long-term inpatient care, emergency services, and personal health services, whose costs are subject to recovery from officially established user charges. Exclusion from SMI of long-term inpatient and emergency care is advocated by MoH and is set forth in the latest modifications of the draft SMI law. This may be a counterproductive approach: once SMI insurers realize they do not have to pay for long-term inpatient and emergency care, they would become uninterested in reducing utilization and raising efficiency of respective services. Moreover, they may implicitly encourage SMI-affiliated providers to shift care to institutions funded outside SMI. Continuity of services and consistency in provider reimbursement alike would, thus, be disrupted to the detriment of both patient health and cost containment.

Presence of individual contributions. The SMI system in Ukraine has been conceived in more *contributory* terms, i.e. with higher financial participation from individual contributors, than in most other countries of the former USSR currently reforming their health care systems. It is generally presumed that individuals, such as the self-ensured and those eligible for co-insurance payments, should be targeted for income-related subsidies to minimize pressure on household budgets. Two kinds of subsidies are considered in this study: exemption of the lowest income-recipients from SMI contributions, and tax transfers to make those contributions less burdensome for households with low-to-medium incomes.

Budget neutrality. When SMI is introduced in Ukraine the amount of health spending on personal health services will remain the same as in the baseline year. This assumption holds true up to the point at which Scenarios 2 to 4 are adjusted for the "matching funding" principle of public health spending (see below).

Cross-subsidization by population group. The social solidarity principle exerts its influence on premium rate valuations. Approximately equal amount of funding will be contributed in SMI premiums for every citizen. The per capita consumption would vary by age/sex population group. Equal contributions on variable need is tantamount to cross-subsidization.

Tax neutrality. This principle implies a policy that offsets distortions in economic behavior and income distribution, that might have occurred from a departure from the baseline tax

structure. In the current setting, the tax neutrality policy is targeted at individuals in certain income categories. The approach is focused on full or partial tax credit or exemption on individual contributions for SMI. Nothing has been done in this study to link SMI contributions to business taxes. The rationale for such connection could be: (1) to reward employers for full compliance with SMI contributions by means of *general* tax gains contingent upon compliance; and/or (2) to hold the aggregate amount of taxation constant by reducing general tax payments at the projected amount of SMI premiums. The latter is important in order not to exacerbate tax disincentives for maintaining employment in the official sector of the economy. Mechanisms of business tax transfers may be factored in the model of health financing, if a consensus is reached in Ukraine that the fiscal system should give up part of general tax revenue to accommodate financial needs of the health care sector.

Full compliance. It is assumed that every payor will play fair by complying at full with its financial obligations to SMI. This is a highly improbable assumption. To minimize non-compliance, a combination of enforcement measures and incentives may be designed for every contributor at the counterparts' request.

Zero structural change. No additional funding is envisaged from efficiency gains within the health care sector, since pro-efficiency structural change is presumed to be none. This is a significant limitation of the model. Structural adjustment should be considered as an important source of savings and improvements in the financial status of the health care sector. Correspondingly, incentives for structural change, primarily those incorporated in competitive contracting and performance-based provider reimbursement should be considered as pivotal to the overall success of health financing reforms. A departure from zero structural change is possible and can be designed and modeled at the request of the counterparts. A variety of targets can be set out for health care structural rationalization, and the impact of each target on the aggregate health spending can be evaluated.

3.4 Adjustment Mechanisms

3.4.1 Subsidies to Households

Two types of subsidization by means of *government direct and tax expenditure* are proposed and modeled in the current study: A. Direct subsidies by means of exempting low income recipients from SMI contributions. B. Income-related tax transfers.

In the first case the government will have to contribute more for SMI to provide coverage for the individuals who are exempt from SMI contributions. This indicates additional*direct* on-budget spending on SMI. In the second case the government gives up part of its tax revenue, by granting tax credit or allowances to the individuals in eligible income groups.

Both credit and allowances relate to individual SMI contributions. The government, thus, contributes to SMI *indirectly*, by accepting reduction in budgetary tax revenue. The latter is referred to as tax expenditure.

The 'exemption provision' is formulated as follows: "Individuals get exemption from SMI contributions if their per capita household income does not exceed certain number of percentage points (let this number be called α *factor*) of the non taxable minimum as calculated for the purposes of personal income taxation.

The poverty criterion here is defined as a differential between the actual and the non-taxable minimal income. Alternatively it could be geared to the official poverty line, which at present is almost four times higher than the non-taxable income minimum, or to wage minimum, which is approximately the same as the non-taxable income minimum.

A preference for a particular benchmark should be considered in terms of political and administrative choices, rather than from the standpoint of economic/social effectiveness of the subsidization mechanism. By shifting α *factor* we can smoothly adjust the monetary and demographic scope of exemptions to any targeted level, thus making any poverty criterion instrumental for the purpose. Quantitative implications equal, preference should be given for a criterion which (i) is recognized officially and has a clear-cut statistical definition, (ii) is subject to regular adjustments for inflation, and (iii) has no political connotation that could put it in the spotlight of a heated politics-driven debate and manipulation. A list of current applications of the three proposed indicators will be helpful for understanding their status and potential strengths and weaknesses as variables in a targeted subsidization formula.

Tax transfers imply that, dependent on the household income, SMI contributions will be compensated in part or in full to the individual payers. If eligibility for such compensations is to be determined *ex post*, they would be contingent upon submission of an annual tax form. That way, SMI-related tax transfers would provide an incentive for the individuals for complying with general taxes.

Eligibility for SMI-related tax transfers may be determined on a prospective basis, e.g. based on the previous year income. Current simulations are based on personal income levels and distribution, reported for 1996.

Tax transfers may take various forms[4]:

- *Tax exemptions*: an income or source of income may be excluded from the tax base.

[4] Tax-related terminology used throughout this report matches OECD standards and may significantly differ from the US equivalents, or just not have them. A good frame of reference to this effect is provided in:*Tax Expenditures. A review of the Issues and Country Practices*. Paris: OECD, 1984: from p.9

- *Tax allowances*: amounts deducted from gross income to arrive at taxable income; these amounts may be positively or negatively related to gross income, or more usually, unrelated to income.
- *Tax credits*: amounts subtracted from tax liability which may or may not be permitted to exceed tax liability.
- *Tax relieves*: reduced rates of tax built into the schedule, which are intended to benefit special groups or activities.

Tax credits and tax allowances were considered in the current study. The focus was placed on tax credits.

Tax credit is the most straightforward instrument of compensating the taxpayer for certain expenditures or activities. It implies partial or full refund of the targeted expenditure. The following rule was tested: The amount of individual contributions for SMI in excess of so many percent (let this variable be called β *factor*) of the difference between the per capita household income and the official poverty line is subject to full tax credit.

The above outlined rule reflects German tradition with SMI individual payments for social insurance. As an alternative approach, US practices in general taxation may be worth given consideration, whereby health expenditure in excess of a certain percent of income is subject to deduction from taxable income (i.e. subject to a tax allowance).

An important difference between the two mechanisms, is that the first one targets for subsidization just health insurance contributions, while the second one takes into account the *aggregate* amount of individual health expenditure in all of its forms. In Ukraine, doctors and health professionals struggle their way through extreme underfunding and salary arrears by charging their patients. Due to the constitutional ban on user fees and lack of incentives for physicians to maximize financial performance of the employer health care facility, most transactions involving payments from the patients are carried out under the counter. Informal user charges account for a predominant part of household health care spending. Clearly, they should be the prime target for subsidization. The American way of tax transfers -- relating total health bill to total income -- might be a viable way of capping household health expenditure, could the informal part of it be documented. Since this is not possible in the current setting of Ukraine, we had to consent to targeting just insurance payments, as the only visible and, therefore, measurable target.

3.4.2 Matching Funding from General Revenue of the Budget

A provision proposed for draft SMI Law sets forth as follows: “The share of the governments in the reformed national health care budget shall not decline below so many percent (let this variable be called γ *factor*) for the next three years”.

The purpose of this provision is to preserve continuity in health financing mix by keeping in check the intensity of its restructuring. Introduction of SMI will make employers and

households alike play an important role in the national health financing. If restructuring is managed in a budget-neutral way, i.e. the new payors are coming to replace the old ones, while holding constant the total amount of spending, then the share of on-budget funding may decline dramatically. This change *per se* may create a transition problem, since new monies are likely to be administered by new and relatively inexperienced institutions. To avoid disruption in health finance administration, old sources, to the extent they are bound to go, should withdraw gradually. A legal provision, setting a fixed or sliding minimal threshold on public spending may resolve the issue.

Another important rationale for fixing the minimal share of on-budget funding is to take advantage of the introduction of SMI and increase the aggregate amount of spending on health. If under budget-neutral arrangement, the share of on-budget outlays declines -- with the introduction of payroll taxes and self-insurance -- below legally required minimal share, the law will demand additional allocations from the budgets, thus pushing the total amount of health spending up. This is, in fact, a statistical tool of matching fund allocation. The more other payors contribute to the health care sector, the lower the share of the governments becomes, and, consequently, the more, relative to the baseline level of public funding, the governments have to add to the aggregate health budget in order to restore their share in the national health budget.

4. DESCRIPTION OF SCENARIOS

4.1 Scenario 1 (Baseline)

This scenario considers SMI revenue by *direct* contributor.

According to draft SMI Act in both of its versions, the government will provide health coverage for the following population groups:

- Non-working children and youths below 16 years of age,
- Full-time students,
- Individuals on maternity leave,
- Able-bodied individuals out of gainful employment, caring for disabled relatives,
- Mothers with many (3+) children, at least one of whom is below 18 years old, and out of gainful employment,
- Disability and survivor pensioners.

The Pension Fund and the Employment Fund of Ukraine will provide coverage to:

- Retirees,
- Registered unemployed (individuals, eligible for unemployment benefits).

The employers will cover

- Employees.

Subject to self-insurance will be:

- Small landowners,
- Self-employed, including sole proprietors,
- Individuals in creative professions, not affiliated with creative guilds,
- Miscellaneous free lancers,
- Members of producer co-ops,
- Farmers,
- Individuals with unspecified source of income.

4.2 Scenarios 2-4

Under Scenario 2, the government in addition to its obligations set forth under Scenario 1, will provide cash transfers for public sector employers at the amount of the employers' contributions for SMI.

Employers in addition to their obligations under Scenario 1, will pay a payroll tax for health insurance of the retirees and the unemployed, thus subsidizing the Pension Fund and the Employment Fund at the amount of their contributions for SMI.

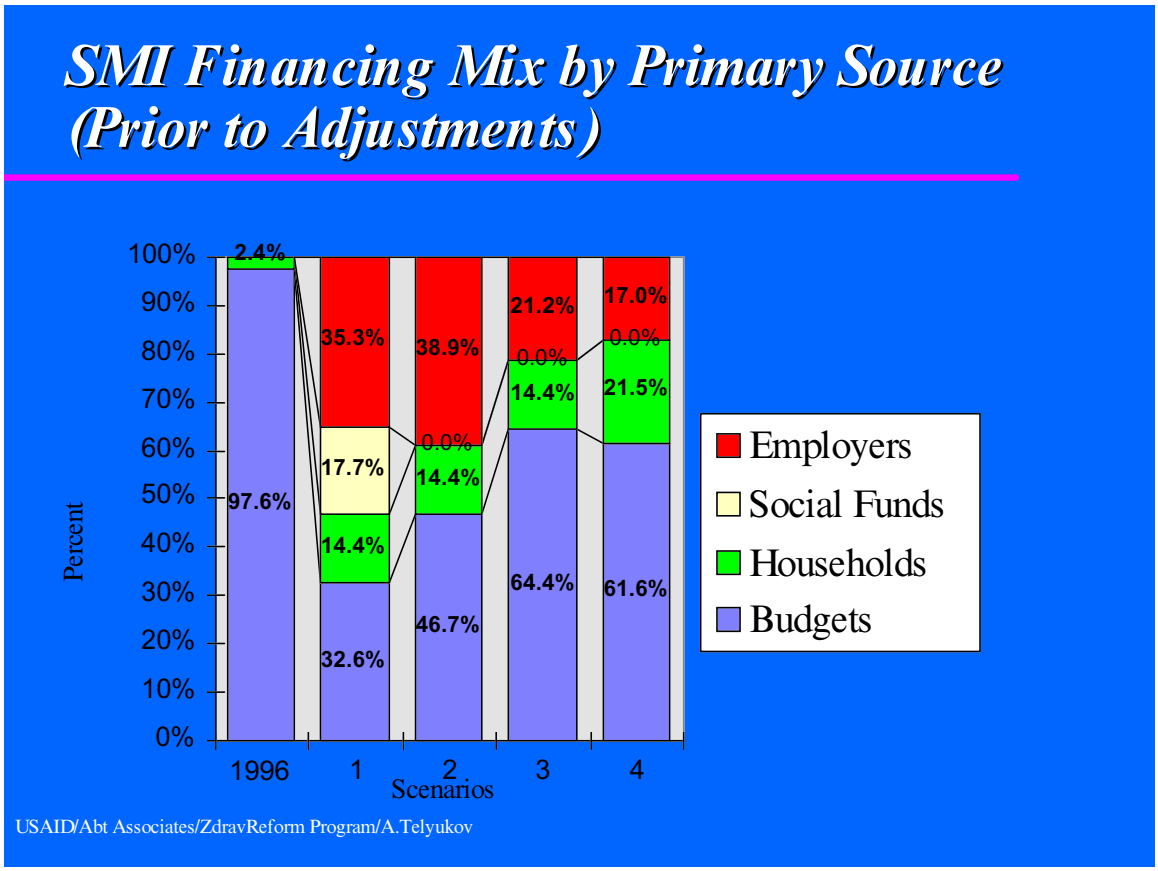
Under Scenario 3 the government will further increase its responsibilities by assuming subsidization of the Pension Fund and the Employment Fund at the amount of their contributions for SMI. Correspondingly, the employers will be relieved from this "Medicare"-type of payroll tax.

Under Scenario 4 everything stays as under previous scenario, with the only difference that employees will co-pay 20 percent of the SMI premium rate.

4.3 Comparative Assessment

Chart 3 presents SMI financing mix, estimated for 1996 and four alternative scenarios.

Chart 3



Only under the first scenario, the social insurance funds are considered as primary contributors for SMI. In every alternative option their contributions are backed up with transfers from other institutional agents, who thus become primary contributors for respective population groups.

The share of the *governments* declines from its baseline level in 1996, as new payors come into play. It, nevertheless, remains significant across all scenarios but varies greatly by scenario. Under Scenario 1 the governments contribute for selected non-working populations and bear some tax expenditures to the benefit of the self-insured. Listed lines of spending, altogether, set the governments' share in the SMI budget at 32.6 percent. Under Scenario 2 the governments provide transfers to public sector employers. Those account for 14.1 percent, thus bringing the total government share up to 46.7 percent. Under Scenario 3, the public share in SMI financing increases further, up to 64.4 percent, as the governments undertake to subsidize the social insurance funds. Under Scenario 4, the governments increase the amount of tax expenditure, as the amount of individual contributions grows with the introduction of 20 percent co-insurance rate for the employees. At the same time, the governments have to spend less on budgetary transfers to public sector employers, since the latter now have to pay just 80 percent of the aggregate premium rate. In sum, the share of public spending slightly declines from 64.4 percent down to 61.6 percent.

Employer payments inversely correlate with those of the governments. Under Scenario 1 the share of payroll tax contributions is 35.3 percent, as employers of both public and business sectors pay for their employees. Under Scenario 2 the employer role as a primary contributor declines when the government offers subsidies to public sector employers. However, it increases dramatically after the "Medicare" payroll tax is introduced. Altogether, the role of the employers grows from 35.3 percent to 38.9 percent.

Households contribute with the steady 14.4 percent of the total SMI budget under scenarios 1-3, whereby only self-insurance requires individual payments. Under scenario 4 the introduction of 20 percent co-insurance rate brings the share of the households up to 21. 5 percent.

Finally, the *social insurance funds* appear as primary (indirect) contributors only under the first scenario, where they provide 17.7 percent of the total SMI revenue by covering designated populations out of their 'own' revenue. Under other scenarios they rely on transfers (subsidies) from other economic institutions and, therefore, do not play any independent role as a contributor to health care financing.

In a comparative perspective, Scenario 1 looks attractive as it offers the most even distribution of SMI-related financial roles among the four involved institutions. It also implies the most streamlined approach to resource allocation to the health care sector. Each economic agent pays on its own, and no interim, lateral allocations are required. Simple as it is, this approach is not quite viable, since public sector employers and the social insurance funds are unlikely to cope with their responsibilities.

Scenario 2 should be evaluated from the standpoint of desirability of a "Medicare" type of tax. The idea of burdening employers with yet another payroll tax does not look acceptable under the present political and economic circumstances.

Scenarios 3 and 4 reserve the largest share for government direct and indirect contributions, thus providing the highest degree of continuity comparative to pre-SMI pattern in health financing. Both scenarios place the responsibility for SMI coverage of the retirees and the unemployed on the governments. On-budget transfers are supposed to flow into the social insurance funds with further allocation to the health care sector. The question arises whether the social insurance funds should be involved in SMI at all. It could make sense if only pension and unemployment benefit money is, or expected to become, available for redistribution to the health care sector. Also, the Pension Fund with its network of local subsidiaries could be instrumental in collecting SMI contributions. However, none of the two considerations is reflected in the draft design of SMI. Therefore, to simplify the institutional layout of SMI, it would stand to reason to eliminate the social insurance funds from the list of contributors and entrust non-employed populations (other than those eligible for self-insurance) to the governments.

Dependent on whether co-insurance is found acceptable, scenario 3 (without co-insurance) or scenario 4 (with co-insurance) may be preferred, as the basic scheme. The preferred scenario could then be tuned up to optimal parameters, e.g. co-insurance rate other than 20 percent. A symbiosis of scenarios is always a possibility, worthwhile to consider.

5. SCENARIO ADJUSTMENT

Scenarios of SMI financing should be adjusted for (i) tax exemptions and transfers to the households, and (ii) the legally required minimal share of on-budget spending on health care. Respective mechanisms were described in *Section 3.4*. This section presents: (i) parameters, set in the current round of simulations; (ii) the quantitative impact of adjustments on the national health care spending and the budgets alike; as well as (iii) some general discussion.

5.1 Tax Exemptions and Transfers

SMI tax exemptions are made available to the individuals with the per capita household income within 300 percent of the non-taxable income minimum. With the non-taxable monthly income of UAH 15, this makes individuals with the income under UAH 45, exempt from individual contributions for SMI.

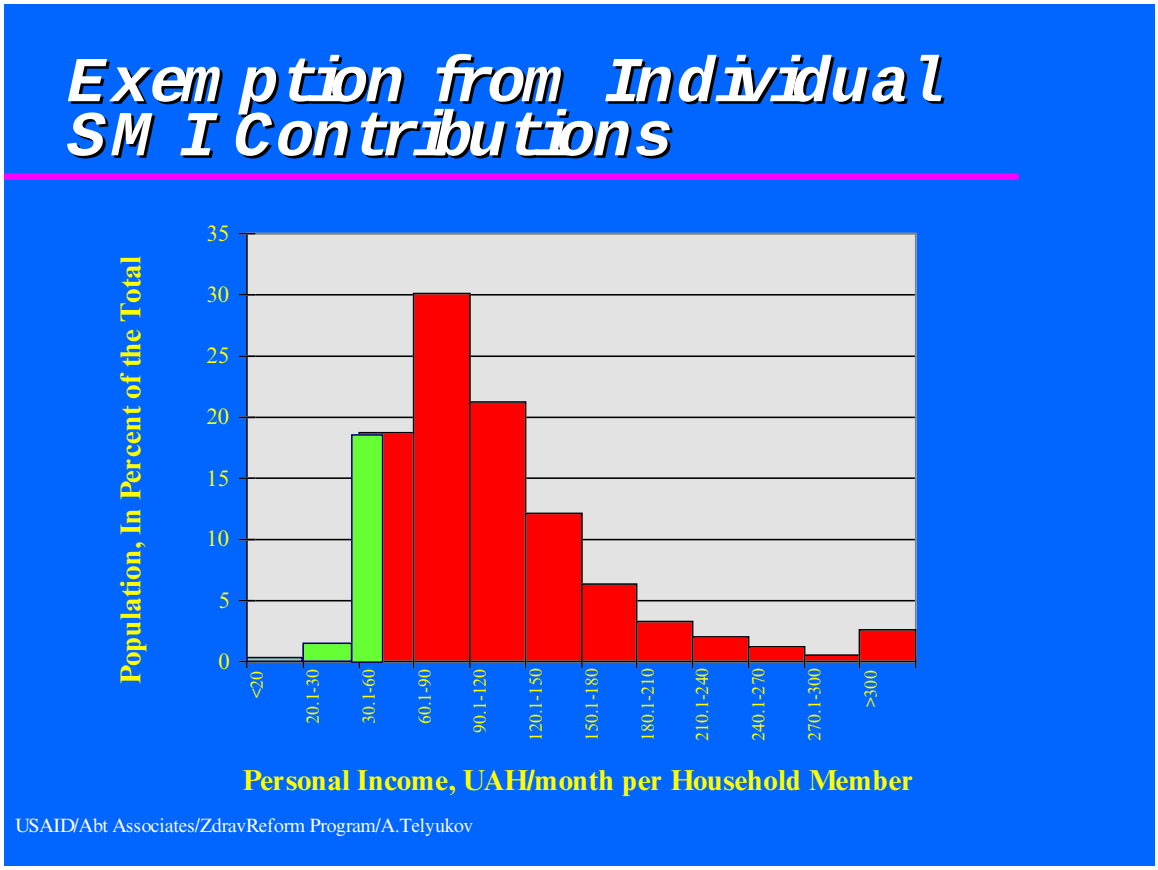
Chart 4 displays household income distribution in Ukraine in 1996. It is assumed that income distribution is the same in any category of individual payors to SMI. For example, the self-employed, retirees, and employees in business sectors are distributed by duodecile income group (each group covering 1/12 of the entire income variation range) in exactly the same way.

In that case, 2.5 lower duodecile income groups will be eligible for exemptions. On the assumption that there is normal distribution of income within each income group, 7.9 percent of individual contributors for SMI become eligible for exemptions. The total number of people and the value amount of exemptions will depend on who is subject to individual contributions.

As to the mechanism of tax credit, the rule was set out that the amount of SMI contributions in excess of 25 percent of the difference between the per-capita household income and the official poverty line is subject to full tax credit. *Chart 5* shows the implications of this mechanism for personal income distribution. Households in the income duodeciles under UAH 45 per capita per month are exempt from SMI contributions, according to the above formulated eligibility rule for exemption. Income recipients in the category of UAH 45-60, get full tax refund on their SMI contributions, that equal 8.17 percent of their annual income. Income recipients in the category of UAH 60-90, get refunded for 4.89 percentage point out of 5.66 percent of their household income

contributed for SMI. Income recipients in the category of UAH 90-120, get a refund on 1.11 percentage point out of 4.04 percent that they have to contribute for SMI. At the point, when the per capita monthly household income reaches UAH 150, households become disqualified from tax credits.

Chart 4

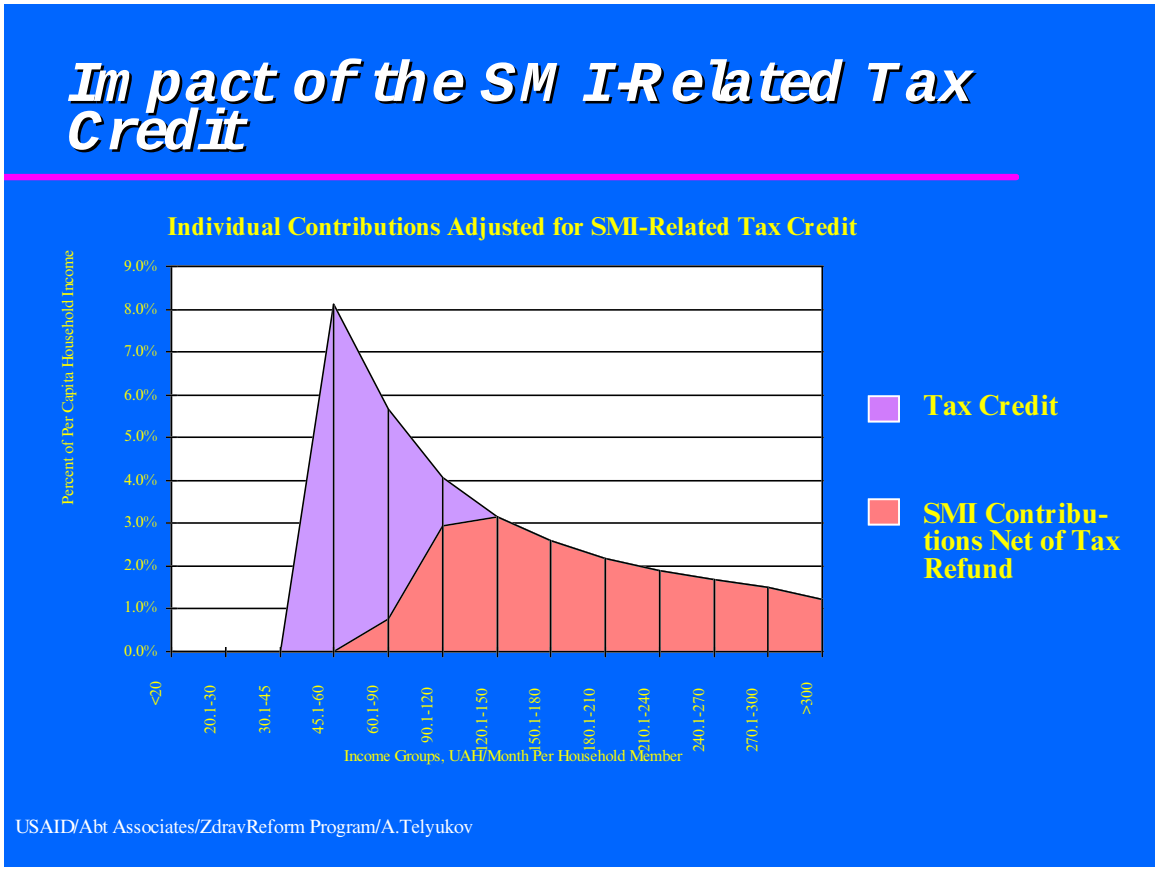


The curve that separates two graph areas on Chart 5, is the individual contribution rate curve modified by means of tax exemptions and credits. As the reader can see, financial burden was completely removed from the three lowest income groups, and was significantly alleviated for duodecile groups 4 and 5. The upper 7 groups will have to contribute for SMI at full rate. However, the statistical contribution rates for middle-to-upper income recipients will not exceed 3.14 percent in the income group of UAH 120-150 and will decline to 1.21 percent in the income group of UAH 300+.

Proposed mechanisms may be modified by adjusting parameters of tax exemptions and credits for specific purposes of income policy. Particularly, the area of tax exemptions may be made narrower or broader by moving the α *factor* (300 percent in our case) down or up.

The *β factor* (25 percent in our model) may be reduced, thus leading to greater tax refunds for households contributing for SMI. It can be set as a variable rather than a fixed percentage, growing in line with the income category. Finally, the mechanism could be

Chart 5



customized for specific categories of the insured, had we known what their income distribution curve looks like. *Ad hoc* modifications could be important for the populations with irregularly structured incomes, e.g. farmers, self-employed, and informally employed individuals.

To illustrate the combined effect of tax exemptions and credits on SMI budget, we have simulated three scenarios.

The first scenario is quite hypothetical: what if all the costs of SMI benefit package are shifted on the insured? Put differently, let us imagine that Ukraine's total population is required to self-insure for SMI. Out of 50.9 million persons 4.0 million will be granted exemptions from SMI contributions. Almost 6.3 million will get full tax refund on their SMI contributions. Another 26 million will enjoy partial refund. In value terms, the population will pay UAH 2,386 million and will avoid paying UAH 205 million in SMI

contributions because of exemptions. Out of the contributed amount, UAH 1,150 million (48.2 percent) will be returned to households in tax credit. In total, the government will have to pick over 1/3 of SMI costs, in order to alleviate financial burden on individual contributors, as the main, under current scenario, payor for SMI. The effective rates of SMI contributions (net of tax credits) in percent of annual per capita household income will be 3.14 percent at the highest (for the 6th duodecile).

This shows, that the SMI benefit package in current prices is quite affordable for the population if supplemented with appropriate mechanisms of tax transfers (similar to the proposed ones). More than likely, most citizens pay under the table much more these days than might be required from them if most SMI costs are shifted on the users of health services. However, informal charges return higher value to the households, since they make a concrete provider accountable for the quality of services in a more focused way than if user payments are pooled in SMI.

The second scenario is more realistic: selected population categories are subject to self-insurance. The number of individual contributors is 7.3 million. Thethird scenario implies both self-insurance and 20 percent of co-insurance for the employees. The total number of individual contributors grows up to 25.3 million. The ratios described for Scenario 1, apply to Scenarios 2 and 3. The volumes of SMI contributions, tax exemptions, and refunds should be scaled down relative to Scenario 1, proportionately to the population involved in individual contributions. All respective numbers appear in Tables 8, 8a, and 8b of the statistical appendix.

Once scenarios 2, 3 and 4 are adjusted for tax expenditure by the governments (in the form of tax transfers to the households), the share of on-budget direct and indirect health spending increases comparative to the numbers in *Chart 3*. It becomes as shown in the first row of *Chart 6*.

5.2 Matching Fund Allocations

It is presumed in the current study that public share in aggregate -- SMI plus non-SMI -- health expenditure shall not decline, according to a legal requirement, below 70 percent. Informal user charges are not considered as part of the national health budget, since little is known about their current volume nation-wide.

Under Scenario 2, public share in the national health financing mix declined to 53.9 percent (line 1 of *Chart 6*). To bring it up to the legally required minimum of 70 percent (line 2), the aggregate health spending will have to be increased by 53.7 percent (line 3). Under Scenario 3, the share of public spending prior to adjustment for matching fund allocation, is 68.9 percent. To increase it up to the 70 percent target, a slight growth of 3.6 percent is required in the national health care budget. Under Scenario 4, the original share of public spending is 70.2 percent. It, thus, exceeds the targeted level of 70 percent. Therefore, no upward adjustment in the national health care budget is needed.

The described mechanism may be used by health policy makers in Ukraine to advocate a one-time increase in the aggregate health care spending. That way, the health care sector may benefit from the introduction of additional sources of revenue, sought to be created under SMI. The formal logic behind such advocacy, as was explained in Section 3.4.2, is the concern for the continuity of health spending: the government share should be kept high enough until alternative sources become fully operational and ready to replace the former main payor.

Chart 6. Impact of Matching Fund Allocations on Aggregate National Health Expenditure

	Scenario 2	Scenario 3	Scenario 4
1. On-budget funding as a share of aggregate national health expenditure	**53.9%**	**68.9%**	**70.2%**
2. Legally required share of public funds in the national health expenditure	**70.0%**	**70.0%**	**70.0%**
3. Increase in health expenditure resulting from matching fund allocations	**53.7%**	**3.6%**	**0.0%**

This is a more rational and, therefore, easy to defend approach than some randomly set targets, that the consultant could hear from his MoH counterparts. For example, there is an idea at the MoH, that the aggregate amount of health expenditure should be restored at its 1980 per capita level of UAH 114 (more than twice higher than in 1996). This was the all-time high, erroneously called at the MoH the *need-based level of financing*. The target is misleading in the sense that the perception of need here is based exclusively on supply-induced factors, rather than on a balanced notion of health risks, optimal utilization, and supply. The target reflects a bit of a wishful thinking approach: it is somewhat unrealistic to expect that the record-high level of funding may be restored in the times of unprecedented economic trough. A more subtle way to promote growth of the health care budget would be to suggest (i) continuity of health financing composition, and (ii) socially responsible attitudes for the part of the governments: since both the employers and the citizens agreed to assume additional financial burden, the governments should match their effort with additional allocations from general revenue of the budget. The schedule of on-budget matching allocations could be designed in a more flexible way than proposed in the current study, e.g. (1) the minimally required share of public spending could be scheduled to decline gradually over the next three to five years; (2) It may vary in any given year, made contingent upon parameters of the overall health financing mix.

6. RESULTING SMI FINANCING RATES

Chart 7 features rates of SMI financing by main contributor. Each rate represents the amount of annual contributions in percent of the money pool on which respective institutions draw their 'purchasing power'.

The first line is not quite illustrative. The 1996 consolidated budget revenue is used here as the denominator to calculate the share of budgetary revenue to be contributed for SMI. Consolidated budget is the total of central and local budgets. It is not disclosed which of the multiple financial roles of the government (see *Section 3.1*) will be backed up with allocations from the central budget, and which ones from the local budgets. The discussion of this issue has been left out so far, primarily because there is no format for such discussion in Ukraine: neither the Supreme Rada committees in charge of the budgetary and tax policy nor the Ministry of Finance have opened up to policy discussions relating to the national health financing reform agenda. Lack of cross-agency coordination will continue to impede the optimization of public roles in the health care financing. If the

Chart 7. SMI Financing Rates by Payor

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
1. On-budget contributions in percent of budget outlays	**2.80%**	**3.54%**	**5.05%**	**5.54%**
2. Self-insurance payments in percent of per capita household income	**3.73%**	**3.73%**	**3.73%**	**3.73%**
3. Employer contributions in percent of payroll	**2.87%**	**4.31%**	**2.87%**	**2.30%**

situation in that respect changes for the better, the burden of SMI financing on the budget should be evaluated in terms of the share of direct and indirect health spending in the *central* budget revenue and outlays, on the one hand, and in the *local* budget revenue and outlays, on the other. Again, these numbers should derive from a multi-partisan policy agreement rather than from purely statistical exercise. The dynamic of the numbers within any particular line of *Chart 7* should be explained in the same way as with *Chart 3* in *Section 4.3*.

7. REVIEW OF SELECTED PROVISIONS OF THE LATEST DRAFT SMI LAW

Subject to review was the latest draft submitted by the MoH to the Ministry of Justice around May 20th, 1997. This draft is likely to be processed in the near future through the Cabinet of Ministers and submitted to the Supreme Rada as an official legislative initiative of the national government. The Health Care, Maternity, and Childhood Committee of the Supreme Rada is not very much concerned about the contents of the MoH draft, considering it nothing but a primer for a better law, yet to be designed under the auspices of the Committee. Current remarks may be used by the experts of the Committee as a preliminary view of the document that they would seek to improve. Remarks are focused on the provisions, directly relating to SMI financing mechanisms.

As the latest revision of Article 3, the MoH has omitted paragraph 2, according to which "the government shall provide funding to the public and community health care facilities", as part of its financial roles under SMI. This change indicates a major improvement, since it restores hope that the government will allocate its resources to SMI financial pool, rather than directly to providers of services. So far, there was no clear distinction between public funding within and without the SMI. There may be lack of understanding at the MoH that under SMI, funds must be contributed on behalf of individuals and to cover costs of certain services. Instead of financing individuals and services, MoH used to finance places where services should be provided. In Russia, for example, this old philosophy continues to be a stumbling block on the way of pooling MoH funds in the SMI.

Paragraph 1 of Article 3 says "including" and would not say "limited to" when listing public health activities to be funded from general revenue of the budget. This leaves a loophole for later inclusion of additional targets for public financing outside SMI. This loophole may be used by the MoH to evade contributions for SMI, or just result in the governments' inability to comply with contributions for SMI, since too much of on-budget resources would have to be spent outside SMI.

Paragraph 3 of Article 3 refers to Article 5 of the current draft law, whereas it should be referring to Article 4(5), that sets forth that local governments shall provide SMI coverage to the population groups specified in Article 5. Neither Article 4 nor Article 5 give a clear idea as to what level of government will contribute for designated non-working populations. Supposedly, it should be local self-administration or oblast government. The answer is important in order to focus feasibility analyses on a concrete level of the fiscal system, rather than on the budgets at large, the way it was done in the current study.

Part 4 of Article 3 provides that a government-operated financial reserve shall be set up to protect the SMI system against catastrophic costs. If such insurance becomes available for free, it will take the responsibility away from SMI for efficient financial performance. A better approach may be to provide a government-funded re-insurance in the event of catastrophic costs on commercial terms, yet more favorable than in the open market-place. Another alternative may be to limit coverage for catastrophic costs to a finite list of diagnoses and conditions, where such costs are imminent or highly probable. The government, then, will undertake to finance respective treatments in part or in full. A

related issue is whether it makes sense to run a government insurance reserve outside the SMI. To reduce financial risks in the SMI system, the government may contribute to a financial reserve, maintained and operated inside SMI. This could be a more economical alternative to setting up an external reserve pool.

The first two lines on page 3 -- in continuation of Part 8 of Article 4 -- provide as follows: "The government shall coordinate the social medical insurance as required by the economic and social policy guidelines". Such vaguely formulated provisions create room for bureaucratic arbitrariness and expose the SMI system to politically driven decisions. The latter would usually have a strongly negative impact on legal and financial stability of the system, and would be detrimental for SMI participants' motivation for efficiency and sustainability. The recommendation would be to omit the above quoted lines or make them self-explanatory.

In the second (unnumbered) paragraph on page 3, the draft law provides that SMI resources shall be allocated to the territories based on a risk adjustment capitation formula. Both morbidity and mortality are proposed for inclusion in the formula. Standard mortality rate usually is used as a proxy for morbidity, so there would be no point in including both factors in the formula. Which of the two risk adjustors should be preferred? -- This can be a topic worth a separate discussion. If a prompt recommendation is required, I would recommend to choose between *adjusted* mortality and *adjusted* morbidity rates. Mortality should be adjusted by excluding causes that cannot be dealt with in the health care sector. Morbidity should be adjusted by excluding routine conditions, e.g. upper respiratory illnesses, with respect to which gross over-reporting may be presumed.

In the same paragraph, the draft law sets forth that 'differentiatedcapitated formula shall be designed by the MoH of Ukraine and approved by the Cabinet of Ministers'. Such provision raises a number of questions and may require some clarifications. Generally speaking, capitated funding serves two purposes in the resource allocation process: (1) Allocation of funds by territory -- oblasts and rayons; (2) Allocation of funds within a given territory by fund-holding health systems. As to the first level, the following considerations seem to be in order. SMI premiums will be collected withinoblasts and will accrue predominantly to the oblast SMI budgets. Article 8 provides that just 10 percent of the oblast SMI revenue will be pooled at the National MHI Fund. Of that amount no more than 5 to 7 percent of the premium money may be made available for redistribution across oblasts. The National SMI Fund will be expected to carry out a pro-active structural policy on these funds. It will be illogical not to admit it to the design of thecapitated formula for cross-territory transfers. Similar to redistribution across oblasts there should be a mechanism of transfers across rayons. Supply/demand patterns on the local health care markets may very significantly. To account for such variability, risk-adjustment process should be managed locally, with Oblast SMI Funds playing a key coordinative role. Furthermore, if Oblast SMI Funds are viewed as the main purchasing authority in the reformed health care sector, they, on the one hand, should bear the main responsibility for financial performance of the SMI system, on the other hand, should be provided with

adequate allocative powers and tools. Decentralized risk adjustment is one of such tools. Finally, there is an issue of risk adjustment as a tool of community rating, to finance managed care plans of various kinds. Here there may be such a great number of financial arrangements, that hardly anything should be done on the national level, except setting out general policy guidelines. In any of the above cases, the overcentralized powers of the MoH in developing capitation mechanisms would be out of place.

Article 4 provides that the National SMI Fund will operate as an insurer. It is not clear on behalf of which population groups.

According to the concluding paragraph of Article 5, alien temporary or permanent residents are subject to SMI on the same terms and conditions as the citizens of Ukraine, unless otherwise is provided in the Ukrainian legislation or regulated by the international treaties ratified by the Supreme Rada. I think, foreign citizens should always have an option of paying at the point of service, or keeping a policy from an international health insurance carrier, or covering themselves through a local voluntary health insurance plan. The SMI act should provide that foreign citizens must be properly informed of and consent to the fact that they will be billed for medical services and will have to pay their bills, directly on indirectly. Restriction to SMI of their consumer choice may be interpreted as a violation of human rights.

Importantly, to protect SMI from adverse selection, there should be a special chapter in the SMI law restricting re-admission to SMI of the individuals who once opted out of it, or declined to join until older age. One way to regulate this issue will be to close SMI for applicants with fewer than certain number of years until retirement. This may be a variable age threshold: dependent on the number of years of previous SMI experience.

The last but two paragraph of Article 6 stipulates that the SMI contract shall be signed between an insurer and a group or individual subscriber ('strakhovatel' in NIS terminology). Among standard provisions the contract shall include 'estimated individual and average degrees of risk for the insured'. It is not clear what this provision means. Perhaps its proponents are talking about a multi-tier premium rate, whereby the rate would be differentiated, allowing for age and sex variations in demand for health resources. In western practice of community rating there will be different rates for single versus family policy. In any event, the language of the provision should be changed to reveal the meaning.

Second paragraph of Article 9 provides that SMI premium rate in percent of payroll shall be subject to annual revisions. In the original draft this provision was linked to the article on the "Generation of Resources for the Health Care Sector", ensuring a zero-to-positive year-to-year growth of the national health budget. This article disappeared in later editions, thus, opening way to downward annual revisions. There is a serious risk that whatever the SMI system saves by improving efficiency of its internal operations and health care delivery alike, will be taken away at the end of the year by reducing premium rate for the

year to come. The contribution rates should be made steady, in real terms, at least for a number of years. Subsequently, they should be open to gradual changes, using some kind of a sliding average formula.

Paragraph 2 of Article 10 is formulated in an exceedingly strong way. The initial draft provided that in the event of self- or non-network referral in non-emergency cases, reimbursement from SMI shall be limited to 80 percent of customary and usual costs. In the latest edition of the draft law, such cases are outright excluded from insurance reimbursement.

Article 13 indicates a radical departure from the initial draft, regarding the status of the Territorial SMI Funds and the National SMI Fund:

- Originally, it was proposed that SMI will be administered by the Territorial SMI Funds (TSMIF) with the status of *self-governed not-for-profit organizations*. In the latest edition the word *self-governed* was replaced with *government* ('gosudarstvenniye').

- In the initial draft it was provided that the National SMI Fund will operate as a trade association of the TSMIFs, performing certain functions on behalf of its members. Correspondingly, the key issues, relating to the activities of the National SMI Fund, shall be regulated by the Plenary Meeting of the TSMIFs representatives. In the later versions of the draft, the MoH tried to establish its dominance in the area of SMI by: (i) putting the National SMI Fund at the top of SMI system, and (ii) securing the Ministry's dominant positions in managing the National Fund. The latest draft rules that the National SMI Fund shall operate *under the auspices* of the MoH.

Clearly, there is a contradiction between the self-governing status of SMI Funds as, supposedly, not-for-profit organizations, on the one hand, and rigid administrative control, sought to be established over them by the MoH, on the other. This ambivalence may be eliminated by either merging SMI Funds with the MoH or securing their independence. In the latter case, the MoH may be granted a quota of representation on the Funds' Board of Directors, to ensure its role in SMI policy making.

Article 15 sets forth that along with the other rights, the insured have the right for voluntary health insurance (VHI) and free choice of insurance career (see, the fourth bullet). It is important to specify here, whether VHI is viewed as an addition to SMI, or may be allowed in lieu of SMI. If the latter holds true, the transition paths from SMI to VHI and back should be regulated (restricted) to avoid adverse selection for the SMI risk pool.

It is not clear, why the insured are required to hold the insurer informed of their health problems and risks (Article 15). This may lead to discrimination of patients with pre-conditions, and other forms of risk rating, incompatible with the principles of SMI.

Article 21 sets forth that provider reimbursement rates under SMI shall be established in such a way as to ensure excess of provider revenue over provider costs. With nothing in the draft legitimizing competitive contracting and provider financial autonomy, this provision may suggest that the entire cost of inefficiency in the health care sector may be indiscriminately shifted onto subscribers for SMI.

A broad range of criticisms should be referred to omissions from the original draft, made in the document's later versions. In particular, the following provisions have been dropped, allegedly at the request of the Ministry of Finance but also, probably, because their meaning could not be fully understood nor appreciated by the non-economists, still dominating the Ministry of Health:

1. The whole range of macro-protection tools to ensure steady allocations of financial resource to the health care sector, i.e. (i) a link between the national health expenditure and the economic growth rate; (ii) deflation as a key tool of planning the national health budget; (iii) the pivotal role of the National Health Accounts in estimating the aggregate amount of health care spending for planning and policy evaluation purposes; (iv) the minimally required share of public spending.

2. Statement of SMI principles, such as comprehensive coverage, social solidarity, cost efficiency and clinical appropriateness.

3. Coordination of benefits in order to avoid excessive coverage.

4. Co-insurance.

5. Tax exemptions and transfers to households.

6. Cap on taxable income for SMI contributions.

7. Definition of health insurance for occupational risks and its separation from SMI for general medical risks.

8. Key principles of voluntary health insurance and its relation to SMI.

9. Exemption of health providers from property and business taxes.

Notably, many of these provisions were preserved in the alternative draft, prepared by the insurance industry for submission to the Supreme Rada.

Among important accomplishments of the MoH draft law, compared to its prototypes in other NIS countries, the provision on the free choice of primary care provider should be mentioned, as well as the provision on the right of health care providers to allocate their budget by input category, at their own discretion.

8. CONCLUSIONS AND FOLLOW-UP STEPS

Current study was focused on the issues of resource generation for the health care sector of Ukraine. The study responds to the need of the MoH of Ukraine, to set and test parameters of a diversified system of health financing, with five economic institutions distinctly present as contributors for SMI.

The *immediate* financial roles of the payors – in terms of who pays to cover whom – are defined in the Draft Health Insurance Law, recently submitted by the MoH (provisions 4 and 5). It is the *indirect* financial roles, however, that need to be identified and assessed in order to enable all the payors to sustain their financial responsibilities. Such roles were proposed under Scenarios 2, 3, and 4: reallocations from employers and the governments will back up the social insurance funds and the public sector employers, both unlikely to have sufficient funds to contribute for SMI on their own.

Since important *contributory* roles may be assigned to the individuals – under self-insurance and co-insurance arrangements – a mechanism of tax transfers to the households was designed and simulated to alleviate the burden of SMI contributions on the households in low-to-lower middle income groups. A combination of exemptions from SMI contributions and tax credits was recommended as preferred mechanism.

A mechanism of matching fund allocations was recommended to the governments as a statistical instrument of increasing the aggregate health care expenditure in an SMI-driven setting.

The conducted study allows to conclude that a multi-payor system of SMI may be factored in the existing network of financial flows and internalized by every participating economic institution, if two out of five are subsidized by the employers and/or the governments at the amount of their contributions for SMI. This, however, raises the issue whether those two institutions – namely the public sector employers and the social insurance funds -- should become involved in SMI contributions at all.

If they have to, the system of payments to SMI will become more complex than may be justified by the expected gains in the total amount of health financing. The complexity itself will make financial losses unavoidable due to rising administrative overheads and lack of coordination among the multiple payors.

At least one consideration, however, may be brought up in favor of keeping public sector employers involved in SMI contributions. By introducing subsidies from general revenue of the budget in order to offset financial pressure on the public sector employers, Ukrainian policy makers create a faucet in the pipe, that can be turned off in the future. The latter would make sense, if cost-recovery is allowed in the social service sectors and providers of

such services would become financially self-sufficient. Then the subsidies may be discontinued.

To discuss these and many other issues relating to SMI financing mechanisms, the Cabinet of Ministers of Ukraine would have to set up an inter-agency task force, representing the Ministry of Finance, the Ministry of Labor, the MoF, the Insurance Supervisory Committee; the State Tax Inspection, Social Insurance Funds, associations of entrepreneurs and self-employed, and oblast administrations.

The agenda for the task force should include but not be limited to the following issues:

1. Division of financial responsibilities among various levels of the government;
2. Separation of health insurance for general medical risks from health insurance for occupational risks;
3. Formulas of risk adjustment and community rating;
4. Mechanisms of equalization transfers across territories;
5. Priorities and targets for structural shifts in the health care sector;
6. Concepts, principles, and instruments of provider payment reforms;
7. Guidelines for the experiments intended for internal rationalization of the health care sector.

This study should be continued in three main directions:

- Regional aspects of SMI design: cross-oblast variations of relevant indicators should be taken into proper account to identify financially non-sustainable oblasts, measure their financial gap, and establish the scope and instruments of transfers to improve their SMI financial status.

- Financial impact analysis and projections for various scenarios of structural adjustment in the health care sector, e.g. how much funds can be saved and/or must be spent on downsizing the network of long-term inpatient care facilities by reducing the length of stay in acute care hospitals, closing down rural community hospitals, strengthening primary physician care in rural areas. The instruments and initial assumptions for such analyses are available and may be customized for Ukrainian setting, should need be recognized.

- Intensive training may be offered to the counterparts on how to use the software instrument designed for this model, to enable them to run the model on alternatively set input parameters. The main potential of the model, yet to be taken advantage of, is that it can be used as a daily companion by the national and local policy makers, in their effort to incorporate financial needs of the health care sector in the economy-wide flows of funds. Prior to such training a user interface could be developed to make the instrument more accessible for less experienced users.

9. REFERENCES

9.1 Acronyms

SMI	Social Medical Insurance
MoH	Ministry of Health [of Ukraine]
UAH	Ukrainian Hrivnya [approximately USD 0.55]

9.2 Trip Activities

May 14th: (1) Arrived in Kyiv. (2) Met with Mr. J. Owens, ZRP/Ukraine Country Director, to discuss the scope of work. (3) Answered a telephone call from Dr. I.Demchenko, Advisor to the Health Minister and Deputy Head of the Health Insurance and Accreditation Administration, MoH. Asked for clarifications on the technical assignment as originally designed by the MoH, and received those.

May 15th: (1) Along with Mr. J. Owens attended the opening session of the international conference "The Topical Issues of Health Care Reforms in Ukraine". Made presentation on the "(Macro)economic Aspects of Health Financing". (2) With prior approval from Ms. M.Varnhagen, USAID/Ukraine ZRP Project Officer, met with Dr. V.Syomin, First Deputy Health Minister, to answer Dr. Syomin's questions concerning design and implementation of mandatory health insurance (MHI) in Ukraine. (3) Accompanied Mr. J. Owens to USAID/Kiev and met with Ms. M. Varnhagen. Received from Ms. Varnhagen a comprehensive update on social reform legislative process in Ukraine. In discussion with Ms. Varnhagen finalized the scope of work by targeting it at two issues: (a) Quantitative evaluation of the main payers' roles in an MHI-driven mix of health financing; (b) Evaluation of the Draft Health Insurance Law.

May 16th: (1) Gave a lecture at the MoH on "The NIS Experiences and Practices in the Area of Health Care Reforms". (2) Met with Dr. Syomin and Dr. Kartysh to conclude the discussion of the previous day. Dr. Syomin reconfirmed the scope of work by encouraging calculation of contribution (financing) rates for the main payers to MHI. Dr.Syomin set out some important benchmarks for simulations, e.g. proposed the 1980 per capita amount of health spending as the best, in his view, proxy of demand for health care resources. (3) Met with Dr. V. Rudiy, Head of Secretariat, The Health, Maternity, and Childhood Committee of the Supreme Rada; Ms. E. Kovzharova, Staff Expert of the same committee, and Ms. Demchenko, to discuss the consultant's technical agenda and evaluate information needs for the fund flow study. (4) Met with Mr. A. Korotko, Deputy Health Minister to discuss current priorities of the Economic Administration of the MoH. All listed discussions and activities were held in strict compliance with the consultant's work plan designed by the MoH at USAID request.

May 17th: (1) Studied the latest update of the Draft Health Insurance Law in order to extract information, necessary for the estimation of MHI financing rates. Started development of worksheets for primary and output data. (2) Met with Dr. Yuriy Popov, Head, Main Administration of Medical Insurance, Licensing, and Accreditation.

May 18-25th: (1) Worked with the Ministry of Statistics, MoH, and the Supreme Rada to fill the gaps in the data set. (2) Developed an instrument for and conducted the fund-flow study. (2) Prepared a presentation graphics set for the Yalta Conference.

May 25th: Traveled to Yalta.

May 26-27th: Attended the Conference. Made two panel presentations. Interacted with the representatives of health policy-making, academic, and private insurance community.

May 28th: (1) Returned from Yalta. (2) Worked on trip report.

May 29th: (1) Presented at the MoH on the findings from the analysis. (2) Transferred the software instrument and the data file to the counterparts at the Health Ministry. (3) Dr. Syomin took the consultant to Dr. A.Serdyuk, the Health Minister of Ukraine for a brief diplomatic exchange.

May 30th: Debriefed country director and USAID project officer on the work done.

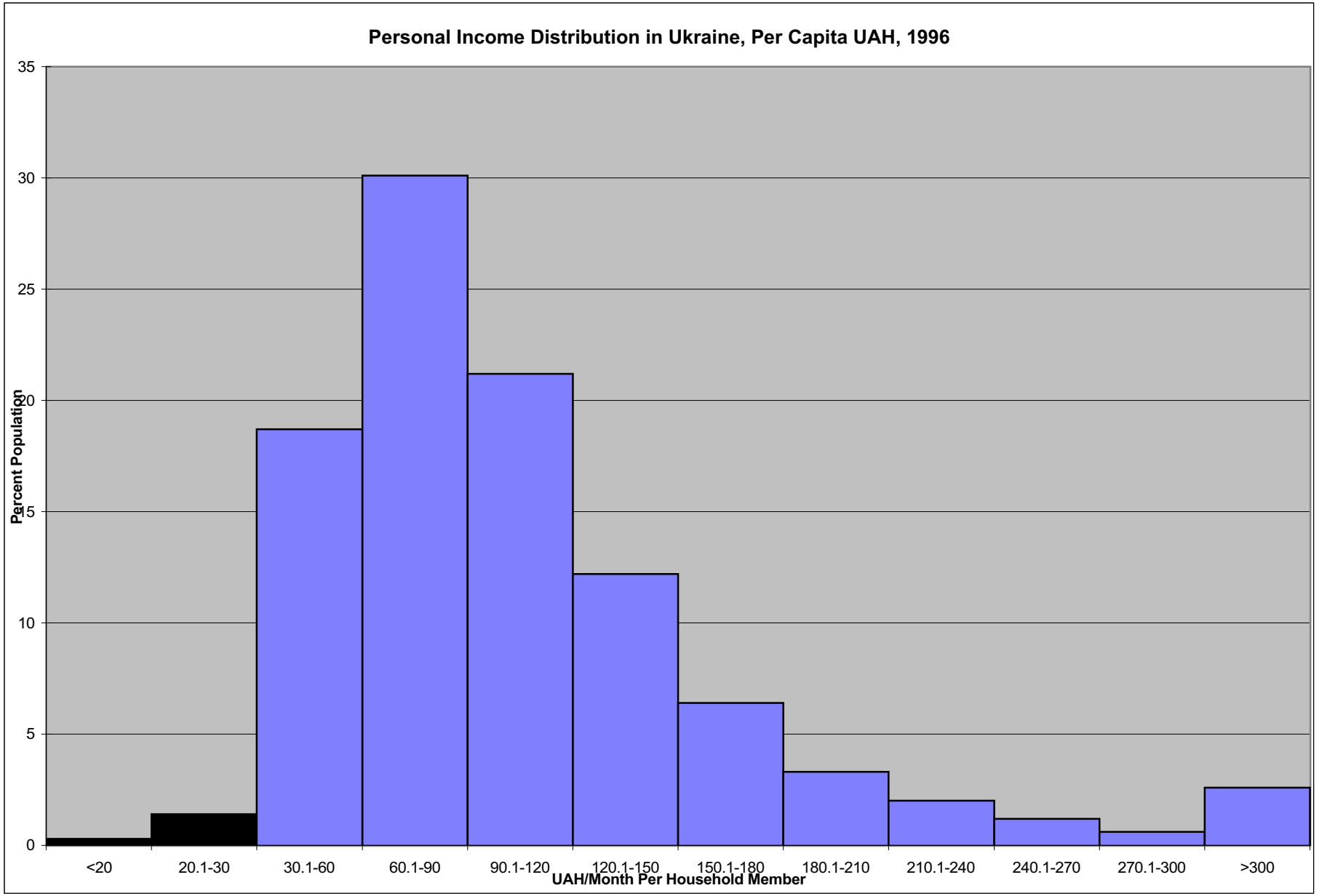
9.3 List of Contacts

Last Name	First and Middle Names	Position, Titles	Organization	Contact Numbers
Mr. Serdyuk	Andrei Mikhailovich	Health Minister	Ministry of Health of Ukraine	7 Grushevskiy St., Kiev, Ukraine 252021; 38-044-293-24-72 (o); 38-044-293-45-63 (fax)
Mr. Syomin	Valeriy Alexandrovich	First Deputy Health Minister	Ministry of Health of Ukraine	7 Grushevskiy St., Kiev, Ukraine 252021; 38-044-226-26-63(o); 38-044-293-69-75 (f)
Mr. Korotko	Alexandr Shimonovich	Deputy Minister	Ministry of Health of Ukraine	7, Grushevsky St., Kiev, Ukraine; phone: 380—44—293—00—56
Ms. Podgornaya	Lyudmila Mikhailovna	Head, Department of Economic Innovation and Health Insurance	Ministry of Health of Ukraine	7, Grushevsky St., Kiev, Ukraine; phone: temporary unavailable (office); 547—40—83 (home)
Ms. Kovzharova	Ella Vladimirovna	Expert, Health Care, Maternity, and Childhood Committee	Supreme Rada	phone: 293—33—31 (office); 271—24—14 (home)
Ms. Demchenko	Inna Borisovna	Adviser to the Health Minister; Deputy Head, Main Administration for Medical Insurance, Licensing and Accreditation	Ministry of Health of Ukraine	7, Grushevsky St., Kiev, Ukraine; phone: 293—33—31 (office); 229—51—04 (home)
Prof. Lekhan	Valeriya Nikitichna	Head, Department of Social Hygiene, Health Management and Organization	Dnepropetrovsk Academy of Medicine	38—0562—417311 (office phone): 38—0562—46—41—91 (fax)
Mr. Schedriy	Petr Vladimirovich	Director, Doct. Econ.	*TransMedStrakh—Ukraine* Stockholding Company	Ukraine 290017 L'viv, P.O. 9511; phone: (0322) 72—38—42; phone/fax: 27 —12—20; (032) 748—33—69; In Kiev: Mailing Address: 254073 Kiev, P.B. 122; phone: (044) 244—09—03; 223—41—31; ph/fax: (044) 244—09—02; Vladimir Andreevich — Office Director in Kiev
Mr. Mostipan	Alexandr Vasilyevich	Head of the Health Department	Dneprodzerzhinsk City Administration	4, G.Romanovoy St., Dneprodzerzhinsk, Ukraine 380—5692/30061; 380—5692/32140 (phone);

STATISTICAL APPENDIX

	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
29	**Table 8b. Individual Contributions and Tax Transfers to Households. Scenario C: Individual Contributions for SMI are Extended to the Self-Insured and 20% Co-Insurance Rate to be Paid by Employed Populations**														
30	**Personal Income Distribution by Income Group: 1996**	**TOTAL**	**1**	**2**	**3a**	**3b**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
31	Income Groups by Total Income Per Month Per Family Member, UAH		<20	20.1-30	30.1-45	45.1-60	60.1-90	90.1-120	120.1-150	150.1-180	180.1-210	210.1-240	240.1-270	270.1-300	>300
32	Population by Income Group, Million Persons	25330,7	76,0	354,6	1578,9	3157,9	7624,5	5370,1	3090,3	1621,2	835,9	506,6	304,0	152,0	658,6
33	Population by Income Group, % of the Total		0,3%	1,4%	6,2%	12,5%	30,1%	21,2%	12,2%	6,4%	3,3%	2,0%	1,2%	0,6%	2,6%
34	Median Income, UAH per Month Per Family Member		15	25	37,5	52,5	75	105	135	165	195	225	255	285	350
35	Aggregate Income in Each Income Group	32204692	13679	106389	710526	1989473	6862087	6766337	5006360	3209906	1956037	1367858	930143	519786	2766112
36	Effective Personal Income Tax Rate, %		0,00%	8,17%	11,58%	11,58%	12,72%	13,71%	14,97%	15,81%	16,40%	16,85%	17,20%	17,48%	17,94%
38	**Individual MSI Contributions to Be Waived (on Personal Income up to 300% of Wage Minimum)**	Personal Income	Population	Percent Population Eligible											
39	Populations and Income Exempt from SMI Contributions	830594	2009,6	3,93%											
40	Required SMI Contribution, UAH Per Capita Per Annum	50,93	0,00	0,00	0,00	50,93	50,93	50,93	50,93	50,93	50,93	50,93	50,93	50,93	50,93
41	SMI Contributions Foregone Because of Exemptions, UAH 1,000 per Annum	**102342**	3870	18060	80411										
42	**Individual SMI Contributions to Be Paid, UAH 1,000 per Annum**	**1187682**				160823	388297	273485	157383	82562	42571	25800	15480	7740	33541
43	Individual SMI Contributions in Percent of Annual Per Capita Personal Income		0,00%	0,00%	0,00%	8,08%	5,66%	4,04%	3,14%	2,57%	2,18%	1,89%	1,66%	1,49%	1,21%
44	**Mechanisms of Tax Transfers**														
45	**Mechanism 1. Income-Related Tax Credit: SMI Contributions are Refunded**														
46	Individual SMI Contributions Not Subject to Tax Refund [Balance between Per Capita Income and Official Poverty Line of UAH 68.12/month]		N/A	N/A	N/A	0,00	6,88	36,88	66,88	96,88	126,88	156,88	186,88	216,88	281,88
47	Individual SMI Contributions Due (UAH Per Capita Per Annum)		0,00	0,00	0,00	50,93	50,93	50,93	50,93	50,93	50,93	50,93	50,93	50,93	50,93
48	Per Capita SMI Contributions to Be Refunded (UAH Per Capita Per Annum)		0,00	0,00	0,00	50,93	44,05	14,05	0,00	0,00	0,00	0,00	0,00	0,00	0,00
49	Total SMI Contributions to Be Refunded (UAH 1,000 Per Annum)	572099	0	0	0	160823	335840	75435	0	0	0	0	0	0	0
50	SMI Contributions to be Refunded in Percent of SMI Contributions Due		N/A	N/A	N/A	100,00%	86,49%	27,58%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%

	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
30	**Personal Income Distribution by Income Group: 1996**	**TOTAL**	**1**	**2**	**3a**	**3b**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
51	SMI Contributions to be Refunded in Percent to Annual Per Capita Income		N/A	N/A	N/A	8,08%	4,89%	1,11%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
52	Per Capita SMI Contributions Net of Refund in Percent to Annual Per Capita Income		0,00%	0,00%	0,00%	0,00%	0,76%	2,93%	3,14%	2,57%	2,18%	1,89%	1,66%	1,49%	1,21%
53	Total SMI Contributions Net of Refund (UAH 1,000 Per Annum)		0,0	0	0	0	52457	198050	157383	82562	42571	25800	15480	7740	33541
54	**Mechanism 2. Income-Related Tax Allowance: SMI Contributions Are Deducted from Taxable Income**														
55	Individual SMI Contributions Not Subject to Tax Allowance [Balance between Per Capita Income and Official Poverty Line of UAH 68.12/month]		N/A	N/A	N/A	0	1,72	9,22	16,72	24,22	31,72	39,22	46,72	54,22	70,47
56	Individual SMI Contributions Due (UAH Per Capita Per Annum)		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
57	Per Capita SMI Contributions to Be Deducted (UAH Per Capita Per Annum)		N/A	N/A	N/A	50,93	44,05	14,05	0,00	0,00	0,00	0,00	0,00	0,00	0,00
58	Total SMI Contributions to Be Deducted (UAH 1,000 Per Annum)	**572099**	N/A	N/A	N/A	160823	335840	75435	0	0	0	0	0	0	0
59	Tax Savings in Percent of Personal Income (UAH 1,000 Per Annum)	**71696**	N/A	N/A	N/A	18629	42726	10341	0	0	0	0	0	0	0
60	SMI Contributions to be Deducted in Percent of Total SMI Contributions		N/A	N/A	N/A	100,00%	96,60%	82,00%	67,30%	52,60%	37,90%	23,20%	8,60%	0,00%	0,00%
61	Per Capita SMI Contributions Net of Refund in Percent to Annual Per Capita Income		N/A	N/A	N/A	0,94%	0,62%	0,15%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
62	Total SMI Contributions Net of Tax Savings (UAH 1,000 Per Annum)		0,00%	0,00%	0,00%	7,15%	5,04%	3,89%	3,14%	2,57%	2,18%	1,89%	1,66%	1,49%	1,21%
63	Percent of SMI Contributions Net of Tax Savings		0,00%	0,00%	0,00%	11,58%	11,00%	3,78%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%


Personal Income Distribution in Ukraine, Per Capita UAH, 1996
Percent Population
35
30
25
20
15
10
5
0
<20
20.1-30
30.1-60
60.1-90
90.1-120
120.1-150
150.1-180
180.1-210
210.1-240
240.1-270
270.1-300
>300
UAH/Month Per Household Member

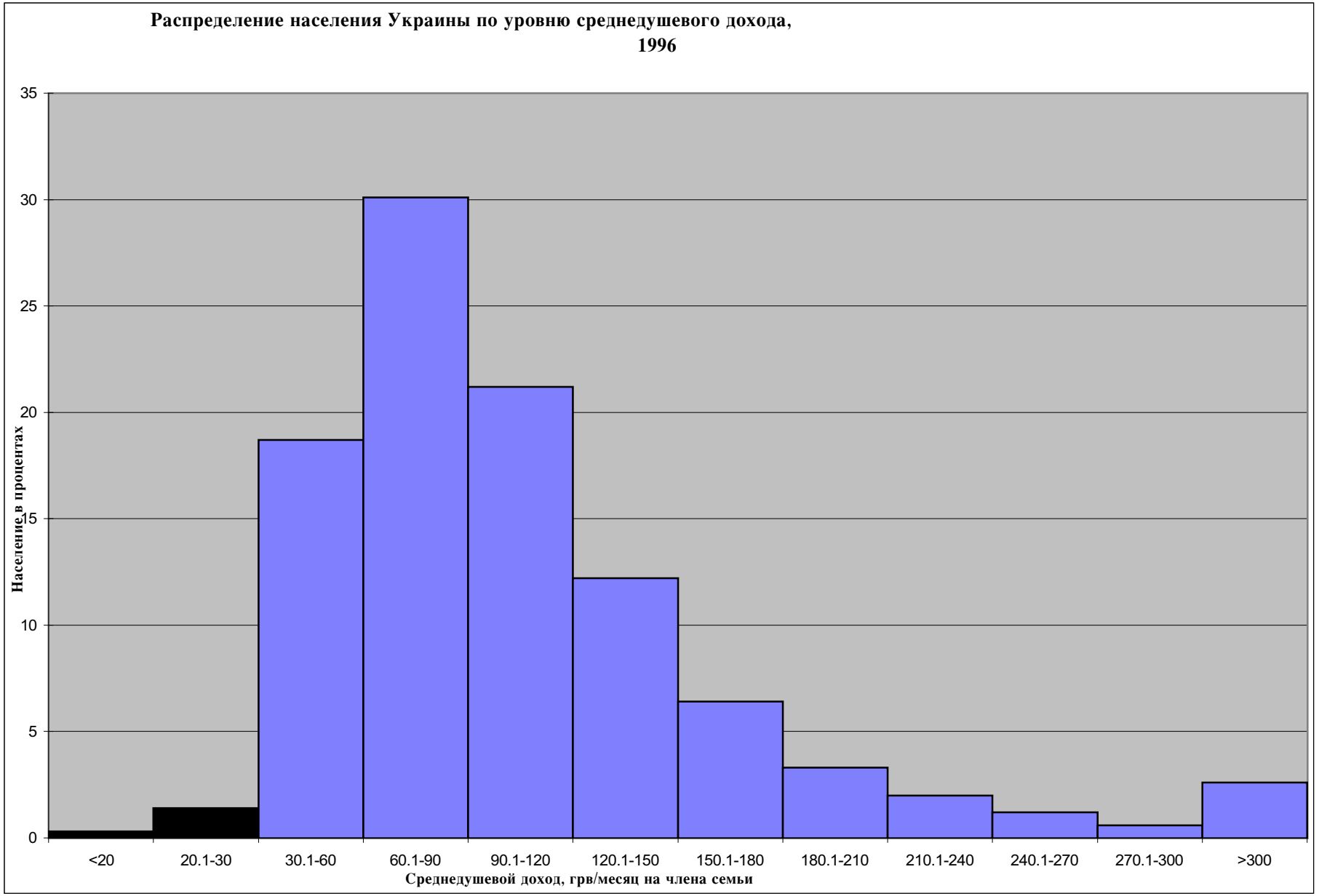
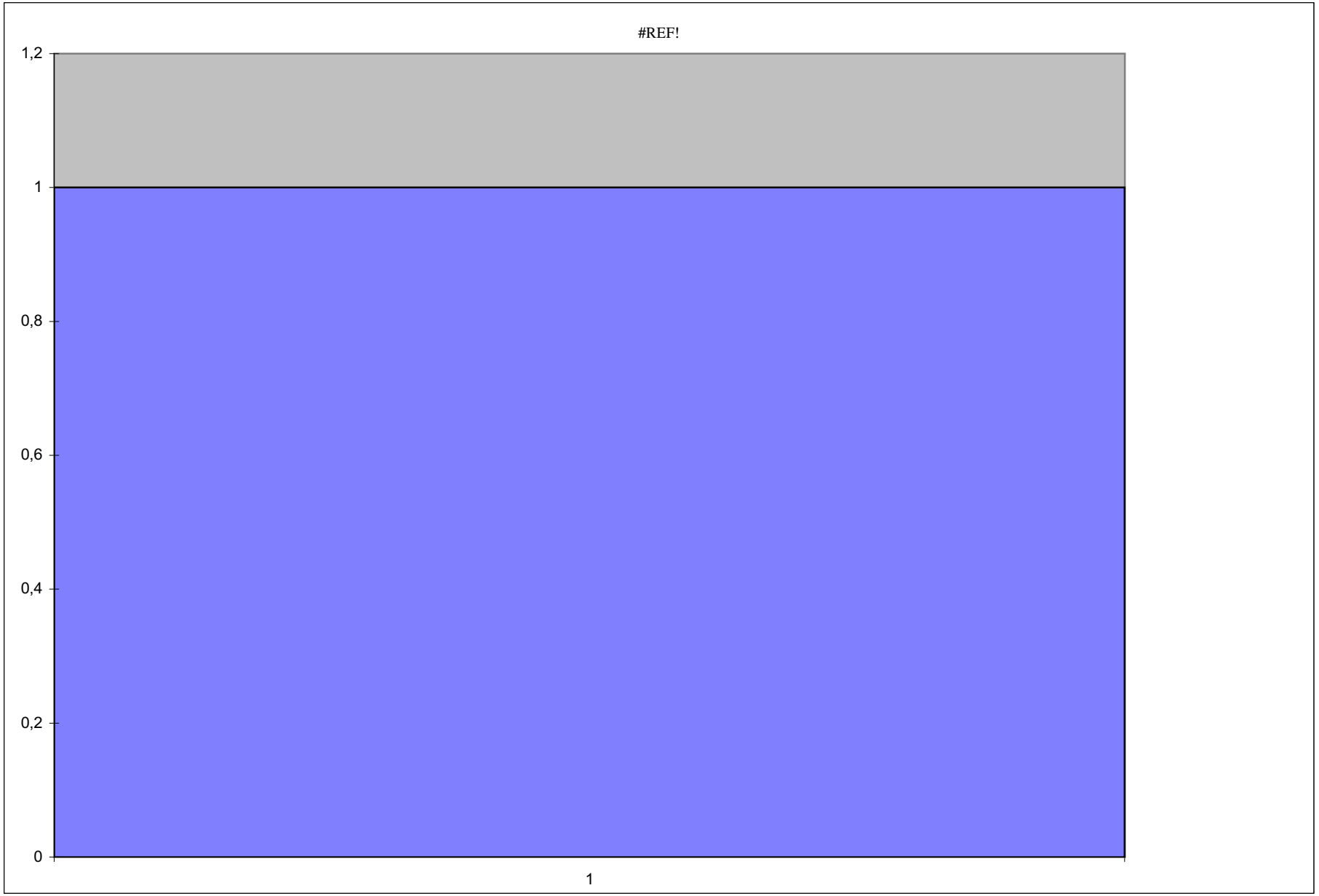

Распределение населения Украины по уровню среднедушевого дохода, 1996
35
30
25
20
15
10
5
0
Население,в процентах
<20
20.1-30
30.1-60
60.1-90
90.1-120
120.1-150
150.1-180
180.1-210
210.1-240
240.1-270
270.1-300
>300
Среднедушевой доход, грв/месяц на члена семьи

Table 8b Chart 2



	C	D	E	F	G	H	I	J	K	L	M	N	O
5	Population Groups	Source of MHI coverage	Enrollment			Budget Neutral Demand for Health Financing, UAH 1,000					MHI Premium Revenue by Final Co		
6			Population , Reported 1996	Age/Sex Adjustment Ratio	Population structure, Percent of the Total	Government (General Revenue of the Budget)			Households	TOTAL	Governments	Individuals	Social Insurance Funds
8	TOTAL		50 899,2	1,000	100,0%	2 592 158	379 689	2 971 847	71 324	3 043 171	844 557,7	372 772,4	457 576,6
9	Share in Aggregate Health Financing					85,18%	12,48%	97,66%	2,34%		32,6%	14,4%	17,7%
10	Non-Employed Population Below 18 Years Old	Local Administration	12 485,6	1,000	24,5%	635 858					635 857,7		
11	Individuals on Maternity Leave	Local Administration	1 050,0	1,000	2,1%	53 474					53 473,6		
12	Non-Employed Individuals, Providing Care to Disabled Relatives	Local Administration	26,0	1,000	0,1%	1 324					1 324,1		
13	Non-Employed Mothers with Many Children of Age Below 18 Years	Self	158,0	1,000	0,3%	8 047					8 046,5		
14	Small Land Owners	Self	1 750,0	1,000	3,4%	89 123						89 123	
15	Self-Employed, Including Free-Lancers and Sole Proprietors	Self	1 930,3	1,000	3,8%	98 305						98 305	
16	Employed in the Informal Sector of the Economy	Self	3 639,4	1,000	7,2%	185 345						185 345	
17	Pensioners: Retirees and Survivors	Pension Fund	8 704,9	1,000	17,1%	443 317							443 316,9
18	Disability and Survivor Pensioners	Local Administration	2 864,0	1,000	5,6%	145 856					145 855,7		
19	Recepients of Unemployment Benefits	Employment Fund	280,0	1,000	0,6%	14 260							14 259,6
20													
21	***Employed in Public Services: Total***	Employer	*7 204,4*	1,000	*14,2%*	366 901							
22	Health Care	Employer	1 239,3	1,000	2,4%	63 114							
23	Physical Training and Sports	Employer	40,2	1,000	0,1%	2 047							
24	Welfare	Employer	71,5	1,000	0,1%	3 641							
25	Education	Employer	1 733,9	1,000	3,4%	88 303							
26	Culture	Employer	246,3	1,000	0,5%	12 543							
27	Arts	Employer	49,7	1,000	0,1%	2 531							
28	Research and development	Employer	249,7	1,000	0,5%	12 717							
29	Public Administration	Employer	573,8	1,000	1,1%	29 222							
30	Army, Police, Security	Employer	3 000,0	1,000	5,9%	152 782							
31													
32	***Employed in Sectors, Other Than Public Services: Total***	Employer	*10 806,6*	1,000	21,2%	550 351							
33	Mining and Manufacturing	Employer	4 641,9	1,000	9,1%	236 399							
34	Agriculture	Employer	542,9	1,000	1,1%	27 648							

	C	D	E	F	G	H	I	J	K	L	M	N	O
5	Population Groups	Source of MHI coverage	Enrollment			Budget Neutral Demand for Health Financing, UAH 1,000					MHI Premium Revenue by Final Co		
6			Population , Reported 1996	Age/Sex Adjustment Ratio	Population structure, Percent of the Total	Government (General Revenue of the Budget)			Households	TOTAL	Governments	Individuals	Social Insurance Funds
35	Forestry	Employer/ Gov't	65,3	1,000	0,1%	3 326							
36	Fishery	Employer	19,2	1,000	0,0%	978							
37	Transportation except railroad and automobile	Employer	1 068,5	1,000	2,1%	54 416							
38	Railroad transportation	Employer	413,6	1,000	0,8%	21 064							
39	Automobile transportation	Employer	409,8	1,000	0,8%	20 870							
40	Transportation except railroad and automobile	Employer	245,1	1,000	0,5%	12 482							
41	Communications	Employer	269,3	1,000	0,5%	13 715							
42	Construction	Employer	994,6	1,000	2,0%	50 652							
43	Retail Trade	Employer	703,7	1,000	1,4%	35 838							
44	Eating and Drinking Places	Employer	185,9	1,000	0,4%	9 467							
45	Procurement and Marketing Services	Employer	109,1	1,000	0,2%	5 556							
46	Warehouses and Related Sservices	Employer	79,3	1,000	0,2%	4 039							
47	Data Processing	Employer	12,1	1,000	0,0%	616							
48	Geologic and Land Survey, Weather Service	Employer	29,8	1,000	0,1%	1 518							
49	Personal Services: Commodity-Related	Employer	96,0	1,000	0,2%	4 889							
50	Housing	Employer	259,9	1,000	0,5%	13 236							
51	Residential Utilities	Employer	457,9	1,000	0,9%	23 320							
52	Personal Services: Unrelated to Commodities	Employer	33,6	1,000	0,1%	1 711							
53	Banking, Finance and Insurance	Employer	169,1	1,000	0,3%	8 612							

	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC
5	ntributor	MHI Premium Revenue by Primary Contributor: Scenario 1			MHI Tax Base and Contribution Rates, by Primary Source: Scenario 1									MHI Premiu Contri
6	Employers				Government [Total disposable budget revenue = 277 230 000]			Users		Employers				
8	917 251,3	1 211 458,2	372 772,4	1 007 927,3	2,32%	1,22%	3,54%	28,29%	3,73%	24 781 474	3,70%	1,85%	5,55%	1 491 987,6
9	35,4%	46,7%	14,4%	38,9%										
10		635 857,7			2,11%									635 857,7
11		53 473,6			0,18%									53 473,6
12		1 324,1			0,00%									1 324,1
13		8 046,5			0,03%									8 046,5
14			89 123											
15			98 305					67,90%	2,07%					
16			185 345											
17				*443 316,9*				67,90%						443 316,9
18		145 855,7												145 855,7
19				*14 259,6*				67,90%						14 259,6
20														
21						1,22%				*6 342 656,5*	5,78%	1,85%	7,63%	
22	63 114,2	63 114,2				0,21%				1 783 919	3,54%	1,85%	5,38%	63 114,2
23	2 047,3	2 047,3				0,01%				55690,5	3,68%	1,85%	5,52%	2 047,3
24	3 641,3	3 641,3				0,01%				79 589	4,58%	1,85%	6,42%	3 641,3
25	88 302,8	88 302,8				0,29%				2 475 129	3,57%	1,85%	5,41%	88 302,8
26	12 543,4	12 543,4				0,04%				287 407	4,36%	1,85%	6,21%	12 543,4
27	2 531,1	2 531,1				0,01%				57 768	4,38%	1,85%	6,23%	2 531,1
28	12 716,5	12 716,5				0,04%				427 332	2,98%	1,85%	4,82%	12 716,5
29	29 222,1	29 222,1				0,10%				1 136 292	2,57%	1,85%	4,42%	
30	152 781,9	152 781,9				0,51%				39 530	386,50%	1,85%	388,34%	
31														
32										*18 438 817,3*	2,98%	1,85%	4,83%	
33	236 399,4			*236 399,4*						8 524 755,5	2,77%			
34	27 648,4			*27 648,4*						568 746,3	4,86%	1,85%	6,71%	

	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC
5	ıtributor	MHI Premium Revenue by Primary Contributor: Scenario 1			MHI Tax Base and Contribution Rates, by Primary Source: Scenario 1									MHI Premiu Contri
6	Employers				Government [Total disposable budget revenue = 277 230 000]			Users		Employers				
35	3 325,6			*3 325,6*						81 501,0	4,08%	1,85%	5,93%	
36	977,8			*977,8*						19 305,4	5,06%	1,85%	6,91%	
37	54 415,8			*54 415,8*						2 047 951,8	2,66%	1,85%	4,50%	
38	21 063,5			*21 063,5*						893 267,7	2,36%	1,85%	4,20%	
39	20 870,0			*20 870,0*						533 504,4	3,91%	1,85%	5,76%	
40	12 482			*12 482,3*						621 179,7	2,01%	1,85%	3,86%	
41	13 714,7			*13 714,7*						544 819,4	2,52%			
42	50 652,3			*50 652,3*						1 871 655,9	2,71%			
43	35 837,5			*35 837,5*						832 970,7	4,30%			
44	9 467,4			*9 467,4*						162 159,6	5,84%			
45	5 556,2			*5 556,2*						193 429,0	2,87%			
46	4 038,5			*4 038,5*						152 609,8	2,65%			
47	616,2			*616,2*						21 511,1	2,86%			
48	1 517,6			*1 517,6*						46 091,2	3,29%			
49	4 889,0			*4 889,0*						68 360,3	7,15%			
50	13 236,0			*13 236,0*						364 860,8	3,63%	1,85%	5,47%	
51	23 319,6			*23 319,6*						857 098,8	2,72%	1,85%	4,57%	
52	1 711,2			*1 711,2*						33 038,9	5,18%			
53	8 611,8			*8 611,8*						562 340,5	1,53%	1,85%	3,38%	

	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP
5	m Revenue by Primary butor: Scenario 2		MHI Tax Base and Contribution Rates, by Primary Source: Scenario 2								MHI Premium Revenue by Primary Contributor: Scenario 3		
6			Government [Total disposable budget revenue = 277 230 000]				Users		Employers (incl. Government Transfers, Received by Employers in Public Services)				
8	372 772,4	176 243,9	2,32%		1,22%	3,54%	28,29%	3,73%	24781473,8	3,70%	1 342 837,9	98 304,9	173 995,6
9													
10			0,23%								635 857,7		
11			0,02%								53 473,6		
12			0,00%								1 324,1		
13			0,03%	0,00%							8 046,5		
14	89 122,7												
15	98 304,9			0,04%			67,90%	2,07%				98 304,9	
16	185 344,8												
17							67,90%				443 316,9		
18													
19							67,90%				14 259,6		
20													
21					0,13%				6 342 656,5	5,78%			
22					0,02%				1 783 919,1	3,54%	63 114,2		
23					0,00%				55 690,5	3,68%	2 047,3		
24					0,00%				79 589,3	4,58%	3 641,3		
25					0,03%				2 475 128,6	3,57%	88 302,8		
26					0,00%				287 407,4	4,36%	12 543,4		
27					0,00%				57 768,0	4,38%	2 531,1		
28					0,00%				427 331,5	2,98%	12 716,5		
29													
30													
31													
32									18 438 817,3	2,98%			
33													
34		27 648,4							568 746,3	4,86%			27 648,4

	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP
5	m Revenue by Primary butor: Scenario 2		MHI Tax Base and Contribution Rates, by Primary Source: Scenario 2								MHI Premium Revenue by Primary Contributor: Scenario 3		
6			Government [Total disposable budget revenue = 277 230 000]				Users		Employers (incl. Government Transfers, Received by Employers in Public Services)				
35		3 325,6							81 501,0	4,08%	1 662,8		1 662,8
36		977,8							19 305,4	5,06%			977,8
37		54 415,8							2 047 951,8	2,66%			54 415,8
38		21 063,5							893 267,7	2,36%			21 063,5
39		20 870,0							533 504,4	3,91%			20 870,0
40		13 714,7							544 819,4	2,52%			13 714,7
41													
42													
43													
44													
45													
46													
47													
48													
49													
50		23 319,6							857 098,8	2,72%			23 319,6
51		1 711,2							33 038,9	5,18%			1 711,2
52													
53		8 611,8							562 340,5	1,53%			8 611,8

	AQ	AR	AS	AT	AU	AV	AW	AX
5	MHI Tax Base and Contribution Rates, by Primary Source: Scenario 3							
6	Government [Total disposable budget revenue = 277 230 000]				Users		Employers (incl. Government Transfers, Received by Employers in Public Services)	
8	0,0		0,0	0,42%	0,3	0,0	24 781 473,8	3,69%
9								
10	0,23%							
11	0,02%							
12	0,00%							
13	0,00%	0,00%						
14								
15		0,04%			67,90%	2,07%		
16								
17	0,16%				67,90%			
18								
19	0,01%				67,90%			
20								
21			0,13%				6 342 656,5	5,78%
22			0,02%				1 783 919,1	3,54%
23			0,00%				55 690,5	3,68%
24			0,00%				79 589,3	4,58%
25			0,03%				2 475 128,6	3,57%
26			0,00%				287 407,4	4,36%
27			0,00%				57 768,0	4,38%
28			0,00%				427 331,5	2,98%
29								
30								
31								
32							6 141 574,2	8,93%
33								
34							568 746,3	4,86%

	AQ	AR	AS	AT	AU	AV	AW	AX
5	MHI Tax Base and Contribution Rates, by Primary Source: Scenario 3							
6	Government [Total disposable budget revenue = 277 230 000]				Users		Employers (incl. Government Transfers, Received by Employers in Public Services)	
35	0,00%						81 501,0	2,04%
36							19 305,4	5,06%
37							2 047 951,8	2,66%
38							893 267,7	2,36%
39							533 504,4	3,91%
40							544 819,4	2,52%
41								
42								
43								
44								
45								
46								
47								
48								
49								
50							857 098,8	2,72%
51							33 038,9	5,18%
52								
53							562 340,5	1,53%

Table 2. Health Care Financing by Primary Payor: Scenario 2

	A	H	I	J	K	L	Q	R	S	T	U	V	W	X
5		Budget Neutral Demand for Health Financing, KGSom					MHI Premium Revenue by Primary Contributor: Scenario 2			Adjustment 1: For tax transfers from the budgets to the households			Adjustment 2: Matching fu budgets to increase pu	
7	POPULATION GROUPS	Government (General Revenue of the Budget)			Households	TOTAL								
8		Personal health services	Public Health, Health Administration, and Fixed Investment	Government Total	User Charges		Governments, incl. subsidies to public sector	Individuals (self-insurance)	Employer contributions, incl. "Medicare" tax	On-budget funding, incl. subsidies to public	Individual contributions	Employer contributions, incl. "Medicare" tax	On-budget health spending: Total	Individual contributions
9	TOTAL	2 592 158	379 689	2 971 847	71 324	3 043 171	1 211 458,2	372 772,4	1 007 927,3	1 260 105,6	324 125,1	1 007 927,3	3273843,7	395 449,4
10	Share in Aggregate Hea	85,18%	12,48%	97,66%	2,34%	0	46,7%	14,4%	38,9%	48,6%	12,5%	38,9%	53,9%	[53.9%-On-budget funding share after the first
11	Non-Employed Population Below 18 Years Old	635 858					635 857,7			635 857,7			Composition of the new health budget	
12	Individuals on Maternity Leave	53 474					53 473,6			53 473,6			70,0%	8,5%
13	Non-Employed Individuals, Providing Care to Disabled Relatives	1 324					1 324,1			1 324,1			New per capita amount	
14	Non-Employed Mothers with Many Children of Age Below 18 Years	8 047					8 046,5			8 046,5			64,32	7,77
15	Small Land Owners	89 123						89 123		11 631	77 492		11 572	65 920
16	Self-Employed, Including Free-Lancers and Sole Proprietors	98 305						98 305		12 829	85 476		12 764	72 712
17	Employed in the Informal Sector of the Economy	185 345						185 345		24 188	161 157		24 065	137 092
18	Pensioners: Retirees and Survivors	443 317							*443 316,9*			*443 316,9*		
19	Disability and Survivor Pensioners	145 856					145 855,7			145 856				
20	Recepients of Unemployment Benefits	14 260							*14 259,6*			*14 259,6*		
21														
22	***Employed in Public Services: Total***	366 901												
23	Health Care	63 114					63 114,2			63 114				
24	Physical Training and Sports	2 047					2 047,3			2 047				
25	Welfare	3 641					3 641,3			3 641				
26	Education	88 303					88 302,8			88 303				
27	Culture	12 543					12 543,4			12 543				
28	Arts	2 531					2 531,1			2 531				
29	Research and development	12 717					12 716,5			12 717				
30	Public Administration	29 222					29 222,1			29 222				
31	Army, Police, Security	152 782					152 781,9			152 782				
32														
33	***Employed in Sectors, Other Than Public Services: Total***	550 351												
34	Mining and Manufacturing	236 399							*236 399,4*			*236 399,4*		
35	Agriculture	27 648							*27 648,4*			*27 648,4*		
36	Forestry	3 326							*3 325,6*			*3 325,6*		
37	Fishery	978							*977,8*			*977,8*		
38	Transportation except railroad and	54 416							*54 415,8*			*54 415,8*		

	A	H	I	J	K	L	Q	R	S	T	U	V	W	X
7	POPULATION GROUPS	Government (General Revenue of the Budget)			Households	TOTAL								
8		Personal health services	Public Health, Health Administration, and Fixed Investment	Government Total	User Charges		Governments, incl. subsidies to public sector	Individuals (self-insurance)	Employer contributions, incl. "Medicare" tax	On-budget funding, incl. subsidies to public	Individual contributions	Employer contributions, incl. "Medicare" tax	On-budget health spending: Total	Individual contributions
39	Railroad transportation	21 064							*21 063,5*			*21 063,5*		
40	Automobile transportation	20 870							*20 870,0*			*20 870,0*		
41	Transportation except railroad and	12 482							*12 482,3*			*12 482,3*		
42	Communications	13 715							*13 714,7*			*13 714,7*		
43	Construction	50 652							*50 652,3*			*50 652,3*		
44	Retail Trade	35 838							*35 837,5*			*35 837,5*		
45	Eating and Drinking Places	9 467							*9 467,4*			*9 467,4*		
46	Procurement and Marketing Services	5 556							*5 556,2*			*5 556,2*		
47	Warehouses and Related Sservices	4 039							*4 038,5*			*4 038,5*		
48	Data Processing	616							*616,2*			*616,2*		
49	Geologic and Land Survey, Weather Service	1 518							*1 517,6*			*1 517,6*		
50	Personal Services: Commodity-Related	4 889							*4 889,0*			*4 889,0*		
51	Housing	13 236							*13 236,0*			*13 236,0*		
52	Residential Utilities	23 320							*23 319,6*			*23 319,6*		
53	Personal Services: Unrelated to Commodities	1 711							*1 711,2*			*1 711,2*		
54	Banking, Finance and Insurance	8 612							*8 611,8*			*8 611,8*		

	Y	Z
1		
5	nd allocations from the blic share up to 70%	
7		
8	Employer contributions, incl. "Medicare" tax	Aggregate amount of health spending
9	##########	4 677 220,5
10		Increase in aggregate health spending
11	national	53,7%
12	21,5%	100,0%
13	of health spending	
14	19,80	91,89
15		
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	Y	Z
7		
8	Employer contributions, incl. "Medicare" tax	Aggregate amount of health spending
39		
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	C	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	**Table 3. Financing (Contribution) Rates by Primary Payor: Scenario 2**										
6	Population Groups	Consolidated budget (1996 reported revenue = UAH 30,142,000,000)				Individuals		Employers			
7		Direct Allocations, Percent of Revenue	Transfers to Households	Transfers to Employers in Public Sectors, Percent of Revenue	Total Direct and Indirect Allocations to SMI, Percent of Revenue	Percent of Monthly Wage Minimum (UAH 180 per annum)	Percent of Household Income Per Family Member (UAH 1364 per annum)	Annual Payroll, UAH 1,000	MHI Contribution Rate as Percent of Payroll	"Medicare" Contribution Rate, as Percent of Payroll	Total SMI Direct and Indirect Contribution, as Percent of Payroll
8	TOTAL	2,80%	0,00%	1,22%	4,02%	28,29%	3,73%	31 917 464	2,87%	1,43%	4,31%
9	Share in Aggregate Health Financing										
10	Non-Employed Population Below 18 Years Old	2,11%									
11	Individuals on Maternity Leave	0,18%									
12	Non-Employed Individuals, Providing Care to Disabled Relatives	0,00%									
13	Non-Employed Mothers with Many Children of Age Below 18 Years	0,03%				0,00%	0,00%				
14	Small Land Owners										
15	Self-Employed, Including Free-Lancers and Sole Proprietors					67,90%	2,07%				
16	Employed in the Informal Sector of the Economy										
17	Pensioners: Retirees and Survivors					67,90%	0,00%				
18	Disability and Survivor Pensioners	0,48%									
19	Recepients of Unemployment Benefits					67,90%	0,00%				
20											
21	***Employed in Public Services: Total***			1,22%				*13 478 646,5*	2,72%	1,43%	4,16%
22	Health Care			0,21%				1 783 919	3,54%	1,43%	4,97%
23	Physical Training and Sports			0,01%				55690,5	3,68%	1,43%	5,11%
24	Welfare			0,01%				79 589	4,58%	1,43%	6,01%
25	Education			0,29%				2 475 129	3,57%	1,43%	5,00%
26	Culture			0,04%				287 407	4,36%	1,43%	5,80%
27	Arts			0,01%				57 768	4,38%	1,43%	5,82%
28	Research and development			0,04%				427 332	2,98%	1,43%	4,41%
29	Public Administration			0,10%				1 136 292	2,57%	1,43%	4,01%
30	Army, Police, Security			0,51%				7 175 520	2,13%	1,43%	3,56%
31											
32	***Employed in Sectors, Other Than Public Services: Total***							*18 438 817*	2,98%	1,43%	4,42%

	C	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
6	Population Groups	Consolidated budget (1996 reported revenue = UAH 30,142,000,000)				Individuals		Employers			
7		Direct Allocations, Percent of Revenue	Transfers to Households	Transfers to Employers in Public Sectors, Percent of Revenue	Total Direct and Indirect Allocations to SMI, Percent of Revenue	Percent of Monthly Wage Minimum (UAH 180 per annum)	Percent of Household Income Per Family Member (UAH 1364 per annum)	Annual Payroll, UAH 1,000	MHI Contribution Rate as Percent of Payroll	"Medicare" Contribution Rate, as Percent of Payroll	Total SMI Direct and Indirect Contribution, as Percent of Payroll
33	Mining and Manufacturing							8 524 755,5	2,77%		
34	Agriculture							568 746,3	4,86%	1,43%	6,29%
35	Forestry							81 501,0	4,08%	1,43%	5,51%
36	Fishery							19 305,4	5,06%	1,43%	6,50%
37	Transportation except railroad and automobile							2 047 951,8	2,66%	1,43%	4,09%
38	Railroad transportation							893 267,7	2,36%	1,43%	3,79%
39	Automobile transportation							533 504,4	3,91%	1,43%	5,35%
40	Transportation except railroad and automobile							621 179,7	2,01%	1,43%	3,44%
41	Communications							544 819,4	2,52%		
42	Construction							1 871 655,9	2,71%		
43	Retail Trade							832 970,7	4,30%		
44	Eating and Drinking Places							162 159,6	5,84%		
45	Procurement and Marketing Services							193 429,0	2,87%		
46	Warehouses and Related Sservices							152 609,8	2,65%		
47	Data Processing							21 511,1	2,86%		
48	Geologic and Land Survey, Weather Service							46 091,2	3,29%		
49	Personal Services: Commodity-Related							68 360,3	7,15%		
50	Housing							364 860,8	3,63%	1,43%	5,06%
51	Residential Utilities							857 098,8	2,72%	1,43%	4,15%
52	Personal Services: Unrelated to Commodities							33 038,9	5,18%		
53	Banking, Finance and Insurance							562 340,5	1,53%	1,43%	2,97%
54		After the first Adjustment									
55		2,80%	0,16%	1,22%	4,18%						

	C	H	I	J	K	L	Q	R	S	T	U	V	W	X	Y	Z
1	**Table 4. Health Care Financing by Primary Payor: Scenario 3**															
7		Government (General Revenue of the Budget)			Households	TOTAL				Adjustment 1: For tax transfers from the budgets to the households			Adjustment 2: For matching fund allocations from the budgets to increase public share up to 70%			
8	Population Groups	Personal health services	Public Health, Health Administration, and Fixed Investment	Government - Total	User Charges		Governments, incl. subsidies to public sector employers and Social Insurance	Individudals (self-insurance)	Employer contributions ("Medicare" tax waived)	On-budget SMI funding	Individual contributions	Employer contributions	On-budget health spending: Total	Individual contributions	Employer contributions	Aggregate amount of health spending
9	TOTAL	2 592 158	379 689	2 971 847	71 324	3 043 171	1 669 034,8	372 772,4	550 350,8	1 717 682,1	324 125,1	550 350,8	2206907,8	395 449,4	550 350,8	3 152 708,1
10	Share in Aggregate Health Financing	85,18%	12,48%	97,66%	2,34%	0	64,4%	14,4%	21,2%	66,3%	12,5%	21,2%	68,9%	[68.9%-on-budget share after Adjustment 1]		Increase in aggregate health spending:
11	Non-Employed Population Below 18 Years Old	635 858					635 857,7			635 857,7			Composition of the new national health budget			3,6%
12	Individuals on Maternity Leave	53 474					53 473,6			53 473,6			70,0%	12,5%	17,5%	100,0%
13	Non-Employed Individuals, Providing Care to Disabled Relatives	1 324					1 324,1			1 324,1			New per capita amount of health spending			
14	Non-Employed Mothers with Many Children of Age Below 18 Years	8 047					8 046,5			8 046,5			43,36	7,77	10,81	61,94
15	Small Land Owners	89 123						89 123		11 631	77 492		11 572	65 920		
16	Self-Employed, Including Free-Lancers and Sole Proprietors	98 305						98 305		12 829	85 476		12 764	72 712		
17	Employed in the Informal Sector of the Economy	185 345						185 345		24 188	161 157		24 065	137 092		
18	Pensioners: Retirees and Survivors	443 317					443 316,9			443 317						
19	Disability and Survivor Pensioners	145 856					145 855,7			145 856						
20	Recepients of Unemployment Benefits	14 260					14 259,6			14 260						
21																
22	***Employed in Public Services: Total***	366 901														
23	Health Care	63 114					63 114,2			63 114						
24	Physical Training and Sports	2 047					2 047,3			2 047						
25	Welfare	3 641					3 641,3			3 641						

	C	H	I	J	K	L	Q	R	S	T	U	V	W	X	Y	Z
7		Government (General Revenue of the Budget)			Households	TOTAL				Adjustment 1: For tax transfers from the budgets to the households			Adjustment 2: For matching fund allocations from the budgets to increase public share up to 70%			
8	Population Groups	Personal health services	Public Health, Health Administration, and Fixed Investment	Government - Total	User Charges		Governments, incl. subsidies to public sector employers and Social Insurance	Individudals (self-insurance)	Employer contributions ("Medicare" tax waived)	On-budget SMI funding	Individual contributions	Employer contributions	On-budget health spending: Total	Individual contributions	Employer contributions	Aggregate amount of health spending
26	Education	88 303					88 302,8			88 303						
27	Culture	12 543					12 543,4			12 543						
28	Arts	2 531					2 531,1			2 531						
29	Research and development	12 717					12 716,5			12 717						
30	Public Administration	29 222					29 222,1			29 222						
31	Army, Police, Security	152 782					152 781,9			152 782						
32																
33	***Employed in Sectors, Other Than Public Services: Total***	550 351														
34	Mining and Manufacturing	236 399							*236 399,4*			*236 399,4*				
35	Agriculture	27 648							*27 648,4*			*27 648,4*				
36	Forestry	3 326							*3 325,6*			*3 325,6*				
37	Fishery	978							*977,8*			*977,8*				
38	Transportation except railroad and automobile	54 416							*54 415,8*			*54 415,8*				
39	Railroad transportation	21 064							*21 063,5*			*21 063,5*				
40	Automobile transportation	20 870							*20 870,0*			*20 870,0*				
41	Transportation except railroad and automobile	12 482							*12 482,3*			*12 482,3*				
42	Communications	13 715							*13 714,7*			*13 714,7*				
43	Construction	50 652							*50 652,3*			*50 652,3*				
44	Retail Trade	35 838							*35 837,5*			*35 837,5*				
45	Eating and Drinking Places	9 467							*9 467,4*			*9 467,4*				
46	Procurement and Marketing Services	5 556							*5 556,2*			*5 556,2*				
47	Warehouses and Related Sservices	4 039							*4 038,5*			*4 038,5*				
48	Data Processing	616							*616,2*			*616,2*				
49	Geologic and Land Survey, Weather Service	1 518							*1 517,6*			*1 517,6*				
50	Personal Services: Commodity-Related	4 889							*4 889,0*			*4 889,0*				
51	Housing	13 236							*13 236,0*			*13 236,0*				
52	Residential Utilities	23 320							*23 319,6*			*23 319,6*				
53	Personal Services: Unrelated to Commodities	1 711							*1 711,2*			*1 711,2*				

	C	H	I	J	K	L	Q	R	S	T	U	V	W	X	Y	Z
7		Government (General Revenue of the Budget)			Households	TOTAL				Adjustment 1: For tax transfers from the budgets to the households			Adjustment 2: For matching fund allocations from the budgets to increase public share up to 70%			
8	Population Groups	Personal health services	Public Health, Health Administration, and Fixed Investment	Government - Total	User Charges		Governments, incl. subsidies to public sector employers and Social Insurance	Individudals (self-insurance)	Employer contributions ("Medicare" tax waived)	On-budget SMI funding	Individual contributions	Employer contributions	On-budget health spending: Total	Individual contributions	Employer contributions	Aggregate amount of health spending
54	Banking, Finance and Insurance	8 612							*8 611,8*			*8 611,8*				

Table 5: Financing (Contribution) Rates: Scenario 3

	C	AA	AB	AC	AD	AE	AF	AG	AH
6	Population Groups	Government [Total disposable budget revenue = UAH 277 230 000]					Individuals		
7		Direct Allocations, Percent of Revenue	Transfers to Households	Transfers to Employers in Public Services, Percent of Revenue	Transfers to Social Insurance Funds	Total Direct and Indirect Allocations to SMI, Percent of Revenue	Percent of Monthly Wage Minimum (UAH 180 per annum)	Percent of Household Income Per Family Member (UAH 1364 per annum)	Annual Payroll, UAH 1,000
8	TOTAL	2,80%	0,00%	1,22%	1,52%	5,54%	28,29%	3,73%	31 917 464
9	Share in Aggregate Health Financing								
10	Non-Employed Population Below 18 Years Old	2,11%							
11	Individuals on Maternity Leave	0,18%							
12	Non-Employed Individuals, Providing Care to Disabled Relatives	0,00%							
13	Non-Employed Mothers with Many Children of Age Below 18 Years	0,03%					0,00%	0,00%	
14	Small Land Owners								
15	Self-Employed, Including Free-Lancers and Sole Proprietors						67,90%	2,07%	
16	Employed in the Informal Sector of the Economy								
17	Pensioners: Retirees and Survivors				1,47%		67,90%	0,00%	
18	Disability and Survivor Pensioners	0,48%							
19	Recepients of Unemployment Benefits				0,05%		67,90%	0,00%	
20									
21	***Employed in Public Services: Total***			1,22%					*13 478 647*
22	Health Care			0,21%					1 783 919
23	Physical Training and Sports			0,01%					55690,5
24	Welfare			0,01%					79 589
25	Education			0,29%					2 475 129
26	Culture			0,04%					287 407
27	Arts			0,01%					57 768
28	Research and development			0,04%					427 332
29	Public Administration			0,10%					1 136 292
30	Army, Police, Security			0,51%					7 175 520
32	***Employed in Sectors, Other Than Public Services: Total***								*18 438 817,3*

	C	AA	AB	AC	AD	AE	AF	AG	AH
7		Direct Allocations, Percent of Revenue	Transfers to Households	Transfers to Employers in Public Services, Percent of Revenue	Transfers to Social Insurance Funds	Total Direct and Indirect Allocations to SMI, Percent of Revenue	Percent of Monthly Wage Minimum (UAH 180 per annum)	Percent of Household Income Per Family Member (UAH 1364 per annum)	Annual Payroll, UAH 1,000
8	TOTAL	2,80%	0,00%	1,22%	1,52%	5,54%	28,29%	3,73%	31 917 464
33	Mining and Manufacturing								8 524 755,5
34	Agriculture								568 746,3
35	Forestry								81 501,0
36	Fishery								19 305,4
37	Transportation except railroad and automobile								2 047 951,8
38	Railroad transportation								893 267,7
39	Automobile transportation								533 504,4
40	Transportation except railroad and automobile								621 179,7
41	Communications								544 819,4
42	Construction								1 871 655,9
43	Retail Trade								832 970,7
44	Eating and Drinking Places								162 159,6
45	Procurement and Marketing Services								193 429,0
46	Warehouses and Related Sservices								152 609,8
47	Data Processing								21 511,1
48	Geologic and Land Survey, Weather Service								46 091,2
49	Personal Services: Commodity-Related								68 360,3
50	Housing								364 860,8
51	Residential Utilities								857 098,8
52	Personal Services: Unrelated to Commodities								33 038,9
53	Banking, Finance and Insurance								562 340,5
54	After the first adjustment:								
55		2,80%	0,16%	1,22%	1,52%	5,70%			

	AI	AJ
1		
6	Employers	
7	MHI Contribution Rate as Percent of Payroll	Total SMI Contributions, Percent of Payroll
8	2,87%	2,87%
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21	2,72%	2,72%
22	3,54%	3,54%
23	3,68%	3,68%
24	4,58%	4,58%
25	3,57%	3,57%
26	4,36%	4,36%
27	4,38%	4,38%
28	2,98%	2,98%
29	2,57%	2,57%
30	2,13%	2,13%
32	2,98%	2,98%

	AI	AJ
7	MHI Contribution Rate as Percent of Payroll	Total SMI Contributions, Percent of Payroll
8	2,87%	2,87%
33	2,77%	2,77%
34	4,86%	4,86%
35	4,08%	4,08%
36	5,06%	5,06%
37	2,66%	2,66%
38	2,36%	2,36%
39	3,91%	3,91%
40	2,01%	2,01%
41	2,52%	2,52%
42	2,71%	2,71%
43	4,30%	4,30%
44	5,84%	5,84%
45	2,87%	2,87%
46	2,65%	2,65%
47	2,86%	2,86%
48	3,29%	3,29%
49	7,15%	7,15%
50	3,63%	3,63%
51	2,72%	2,72%
52	5,18%	5,18%
53	1,53%	1,53%
54		
55		

	C	H	I	J	K	L	M	N	O	Q	R	S	T	U	V	W	X	Y	Z
1	**Table 6. Health Care Financing by Primary Source: Scenario 4**																		
7	Population Groups	Government (General Revenue of the Budget)			Households	TOTAL							Adjustment 1: For tax transfers from the budgets to the households			Adjustment 2: For matching fund allocations from the budgets to increase public share up to 70%			
8		Personal health services	Public Health, Health Administration, and Fixed Investment	Government - Total	User Charges		Government contributions for MHI	Individual contributions for MHI	The Social Fund contributions for MHI	Governments, incl. subsidies to public sector employers and Social Insurance Funds	Individudals: Self-insurance and 20% co-insurance	Employer contributions ("Medicare" tax waived)	On-budget SMI funding	Individual contributions	Employer contributions	On-budget health spending: Total	Individual contributions	Employer contributions	Aggregate amount of health spending
9	TOTAL	2 592 158	379 689	2 971 847	71 324	3 043 171	844 557,7	372 772,4	457 576,6	1 595 654,7	556 222,7	440 280,6	1 756 500,9	395 376,5	440 280,6	2136306,3	466 700,8	440 280,6	3 043 287,7
10	Share in Aggregate Health	85,18%	12,48%	97,66%	2,34%	0	32,6%	14,4%	17,7%	61,6%	21,5%	17,0%	67,8%	15,3%	17,0%	70,2%	[70.2%-share of on-budget funding after the first adjustment)		Increase in aggregate health spending:
11	Non-Employed Population Below 18 Years Old	635 858					635 857,7			635 857,7			635 857,7			Composition of the new national health budget			0,0%
12	Individuals on Maternity Leave	53 474					53 473,6			53 473,6			53 473,6			70,2%	15,3%	14,5%	100,0%
13	Non-Employed Individuals, Providing Care to Disabled Relatives	1 324					1 324,1			1 324,1			1 324,1			New per capita amount of health spending			
14	Non-Employed Mothers with Many Children of Age Below 18 Years	8 047					8 046,5			8 046,5			8 046,5			41,97	9,17	8,65	59,79
15	Small Land Owners	89 123						89 123			89 123		25 772	63 351		9 460	53 891		
16	Self-Employed, Including Free-Lancers and Sole Proprietors	98 305						98 305			98 305		28 427	69 878		10 435	59 443		
17	Employed in the Informal Sector of the Economy	185 345						185 345			185 345		53 597	131 748		19 673	112 074		
18	Pensioners: Retirees and Survivors	443 317							443 316,9	443 316,9			443 317						
19	Disability and Survivor Pensioners	145 856					145 855,7			145 855,7			145 856						
20	Recepients of Unemployment Benefits	14 260							14 259,6	14 259,6			14 260						
21																			
22	***Employed in Public Services: Total***	366 901																	
23	Health Care	63 114								50 491,3	12 622,8		54 142	8 973					
24	Physical Training and Sports	2 047								1 637,8	409,5		1 756	291					
25	Welfare	3 641								2 913,0	728,3		3 124	518					
26	Education	88 303								70 642,3	17 660,6		75 749	12 554					
27	Culture	12 543								10 034,7	2 508,7		10 760	1 783					
28	Arts	2 531								2 024,9	506,2		2 171	360					
29	Research and development	12 717								10 173,2	2 543,3		10 909	1 808					
30	Public Administration	29 222								23 377,7	5 844,4		25 068	4 154					
31	Army, Police, Security	152 782								122 225,5	30 556,4		131 062	21 720					
32																			
33	***Employed in Sectors, Other Than Public Services: Total***	550 351																	

	C	H	I	J	K	L	M	N	O	Q	R	S	T	U	V	W	X	Y	Z
34	Mining and Manufacturing	236 399									47 279,9	*189 119,5*	13 672	33 608	*189 119,5*				
35	Agriculture	27 648									5 529,7	*22 118,7*	1 599	3 931	*22 118,7*				
36	Forestry	3 326									665,1	*2 660,4*	192	473	*2 660,4*				
37	Fishery	978									195,6	*782,2*	57	139	*782,2*				
38	Transportation except railroad and automobile	54 416									10 883,2	*43 532,6*	3 147	7 736	*43 532,6*				
39	Railroad transportation	21 064									4 212,7	*16 850,8*	1 218	2 994	*16 850,8*				
40	Automobile transportation	20 870									4 174,0	*16 696,0*	1 207	2 967	*16 696,0*				
41	Transportation except railroad and automobile	12 482									2 496,5	*9 985,8*	722	1 775	*9 985,8*				
42	Communications	13 715									2 742,9	*10 971,8*	793	1 950	*10 971,8*				
43	Construction	50 652									10 130,5	*40 521,8*	2 929	7 201	*40 521,8*				
44	Retail Trade	35 838									7 167,5	*28 670,0*	2 073	5 095	*28 670,0*				
45	Eating and Drinking Places	9 467									1 893,5	*7 573,9*	548	1 346	*7 573,9*				
46	Procurement and Marketing Services	5 556									1 111,2	*4 444,9*	321	790	*4 444,9*				
47	Warehouses and Related Services	4 039									807,7	*3 230,8*	234	574	*3 230,8*				
48	Data Processing	616									123,2	*493,0*	36	88	*493,0*				
49	Geologic and Land Survey, Weather Service	1 518									303,5	*1 214,1*	88	216	*1 214,1*				
50	Personal Services: Commodity-Related	4 889									977,8	*3 911,2*	283	695	*3 911,2*				
51	Housing	13 236									2 647,2	*10 588,8*	766	1 882	*10 588,8*				
52	Residential Utilities	23 320									4 663,9	*18 655,7*	1 349	3 315	*18 655,7*				
53	Personal Services: Unrelated to Commodities	1 711									342,2	*1 368,9*	99	243	*1 368,9*				
54	Banking, Finance and Insurance	8 612									1 722,4	*6 889,4*	498	1 224	*6 889,4*				
55	Warehouses and Related Services						844 557,7	372 772,4	457 576,6										
56	Data Processing						2 592 158,0			2 592 158,0									

	C	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	**Table 5: Financing (Contribution) Rates: Scenario 4**										
6		Government [Total disposable budget revenue = UAH 277 230 000]					Individuals		Employers		
7	Population Groups	Direct Allocations, Percent of Revenue	Transfers to Households	Transfers to Employers in Public Services, Percent of Revenue	Transfers to Social Insurance Funds	Total Direct and Indirect Allocations to SMI, Percent of Revenue	Percent of Monthly Wage Minimum (UAH 180 per annum)	Percent of Household Income Per Family Member (UAH 1364 per annum)	Annual Payroll, UAH 1,000	MHI Contribution Rate as Percent of Payroll	Total SMI Contributions, Percent of Payroll
8	TOTAL	2,80%	0,00%	0,21%	1,52%	4,53%	28,29%	3,73%	26 114 382	2,30%	2,30%
9	Share in Aggregate Health Financing										
10	Non-Employed Population Below 18 Years Old										
11	Individuals on Maternity Leave	2,11%									
12	Non-Employed Individuals, Providing Care to Disabled Relatives	0,18%									
13	Non-Employed Mothers with Many Children of Age Below 18 Years	0,00%					0,00%	0,00%			
14	Small Land Owners	0,03%									
15	Self-Employed, Including Free-Lancers and Sole Proprietors						67,90%	2,07%			
16	Employed in the Informal Sector of the Economy										
17	Pensioners: Retirees and Survivors						67,90%	2,07%			
18	Disability and Survivor Pensioners				1,47%						
19	Recepients of Unemployment Benefits	0,48%			0,05%		67,90%	0,00%			
20											
21	***Employed in Public Services: Total***			1,22%					*7 675 564,3*	3,82%	3,82%
22	Health Care			0,21%					1 783 919	2,83%	2,83%
23	Physical Training and Sports			0,01%					55690,5	2,94%	2,94%
24	Welfare			0,01%					79 589	3,66%	3,66%
25	Education			0,29%					2 475 129	2,85%	2,85%
26	Culture			0,04%					287 407	3,49%	3,49%
27	Arts			0,01%					57 768	3,51%	3,51%
28	Research and development			0,04%					427 332	2,38%	2,38%
29	Public Administration			0,10%					1 136 292	2,06%	2,06%
30	Army, Police, Security			0,51%					1 372 438	8,91%	8,91%
31											
32	***Employed in Sectors, Other Than Public Services: Total***								*18 438 817*	2,39%	2,39%

	C	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
6		Government [Total disposable budget revenue = UAH 277 230 000]					Individuals		Employers		
7	Population Groups	Direct Allocations, Percent of Revenue	Transfers to Households	Transfers to Employers in Public Services, Percent of Revenue	Transfers to Social Insurance Funds	Total Direct and Indirect Allocations to SMI, Percent of Revenue	Percent of Monthly Wage Minimum (UAH 180 per annum)	Percent of Household Income Per Family Member (UAH 1364 per annum)	Annual Payroll, UAH 1,000	MHI Contribution Rate as Percent of Payroll	Total SMI Contributions, Percent of Payroll
33	Mining and Manufacturing								8 524 755,5	2,22%	2,22%
34	Agriculture								568 746,3	3,89%	3,89%
35	Forestry								81 501,0	3,26%	3,26%
36	Fishery								19 305,4	4,05%	4,05%
37	Transportation except railroad and automobile								2 047 951,8	2,13%	2,13%
38	Railroad transportation								893 267,7	1,89%	1,89%
39	Automobile transportation								533 504,4	3,13%	3,13%
40	Transportation except railroad and automobile								621 179,7	1,61%	1,61%
41	Communications								544 819,4	2,01%	2,01%
42	Construction								1 871 655,9	2,17%	2,17%
43	Retail Trade								832 970,7	3,44%	3,44%
44	Eating and Drinking Places								162 159,6	4,67%	4,67%
45	Procurement and Marketing Services								193 429,0	2,30%	2,30%
46	Warehouses and Related Sservices								152 609,8	2,12%	2,12%
47	Data Processing								21 511,1	2,29%	2,29%
48	Geologic and Land Survey, Weather Service								46 091,2	2,63%	2,63%
49	Personal Services: Commodity-Related								68 360,3	5,72%	5,72%
50	Housing								364 860,8	2,90%	2,90%
51	Residential Utilities								857 098,8	2,18%	2,18%
52	Personal Services: Unrelated to Commodities								33 038,9	4,14%	4,14%
53	Banking, Finance and Insurance								562 340,5	1,23%	1,23%
54	Warehouses and Related Sservices	После 1-ой коррекции									
55	Data Processing	3,76%	1,51%	0,21%	0,00%	5,48%					
56	Geologic and Land Survey, Weather Service										
57	Related										
58	Housing										
59	Residential Utilities										
60	Personal Services: Non-Commodity										

Учреждения здравоохранения по категориям	Стационарная помощь			Амбулаториая помощь		Скорая и неотложная помощь	Охрана общественного здоровья										Управление здравоохранением			ВСЕГО: Текущее финансирование	Капитальные вложения	ИТОГО: Финансирование здравоохранения
Учреждения здравоохранения по видам	Больницы	Диспансеры	Территориальные медицинские объединения	Поликлиники и амбулатории	ФАПы	Станции скорой и неотложной помощи	Станции переливания крови	Санатории для больных туберкулезом	Санатории для детей и подростков (детубе	Санаторий медицинской реабилитации	Дома ребенка	СЭС	Дезинфекционные станции	Мероприятия по борьбе с эпидемиями	Центры здоровья и санитарного просвеще	Прочие мероприятия по охране здоровья	Медико-санитарные реабилитационные комиссии	Службы технического надзора	Централизованные бухгалтерии	Группыы по централизованному хоз. обслуживанию			
ВСЕГО	1 995 742,0	27 195,0	377 664,0	148 347,0	43 210,0	69 838,0	27 544,0	20 554,0	24 917,0	55,0	20 934,0	95 732,0	4 282,0	1 605,0	1 689,0	41 874,0	8 744,0	403,0	15 864,0	627,0	2 926 820,0	45 027,0	2 971 847,0
Code Number																							
1.1.0.0.			26 131,4	2 696,8	1 212,9		50,3		499,3		365,4	2 311,6						101,6	364,6		#REF!		
1.2.1.1.			8 840,1	1 018,1	403,3		17,3		172,0		135,7	788,5						28,2	125,8		#REF!		
1.3.1.1.			40,5		1,8						1,2	11,7						2,0			#REF!		
1.3.1.2.																					#REF!		
1.3.2.1.			618,4	2,0	12,0				2,0			4,2							1,5		#REF!		
1.3.2.2.			6 584,8	90,2	169,1		49,4		92,0		50,5	75,1									#REF!		
1.3.2.3.			4 798,9				1,6		435,5		140,2										#REF!		
1.3.3.1.			14 655,6	239,0	145,6		1,2		120,0		60,7	205,6						20,0	7,0		#REF!		
1.3.3.2.																					#REF!		
1.3.3.3.			1 537,7	43,9					26,4			312,1						3,0			#REF!		
1.3.4.1.			1 358,7	113,8	30,6		1,3		37,0		1,0	65,6						112,0			#REF!		
4.0.0.4.			1 019,7						425,0			39,0									#REF!		
			2 165,2	172,0								131,5									#REF!		#REF!
			61 740,3	3 992,7	1 650,4	0,0	97,2	0,0	1 608,3		678,4	4 030,5	0,0	0,0			0,0	259,4	440,2		#REF!	8 588,5	#REF!
			60 087,7	3 960,4	1 650,4	0,0	95,6	0,0	1 605,1		675,3	3 284,4	0,0	0,0			0,0	227,0	440,2		#REF!	8 588,5	#REF!
Code Number																							
1.1.0.0.			24 339,9	2 548,9	1 106,9		35,6		456,7		286,1	1 906,2						87,4	311,9		#REF!		
1.2.1.1.			8 818,9	1 062,2	347,1		7,0		133,7		135,6	764,9						28,1	121,3		#REF!		
1.3.1.1.			41,0		2,0						1,2	6,2									#REF!		
1.3.1.2.																					#REF!		
1.3.2.1.			574,2	4,3	2,4							3,6									#REF!		
1.3.2.2.			6 880,0	71,4	55,1		49,4		72,0		50,5	48,6									#REF!		
1.3.2.3.			4 819,4				1,6		417,4		140,2										#REF!		
1.3.3.1.			10664,3	180,1	107,4		0,7		77,1		60,7	200,7						0,5	7,0		#REF!		
1.3.3.2.																					#REF!		
1.3.3.3.			1 518,8	30,4	2,0				16,3			286,2									#REF!		
1.3.4.1.			1 373,7	63,1	26,5		1,3		31,9		1,0	53,1						111,0			#REF!		
4.0.0.4.			1 057,5		1,0				400,0			14,9									#REF!		
			1 652,6	32,3			1,6		3,2		3,1	746,1						32,4			#REF!		#REF!
			49	46	171		1		3		1	10						1	10				292
			4 692						180		95												4 967
			#REF!																				
			#REF!						50 900		32 600												#REF!
			9 130,75	**990,25**	**407,00**		**17,00**		**180,35**		**106,50**	**700,70**						**10,00**	**103,00**				**11 645,55**
			1 621,75	271,00			3,50		12,25		3,00	194,00											2 105,50
			506,50	*0,00*																			506,50
			3 933,00	477,50	283,00		8,50		48,95		48,00	325,50											5 124,45
			2 138,55	146,00	119,00		4,00		42,95		21,00	73,00											2 544,50
			22 159,5	**2 462,9**	**1 115,4**	**0,0**	**43,3**	**0,0**	**292,2**		**231,7**	**1 743,4**	**0,0**	**0,0**			**0,0**	**0,0**	**0,0**				**28 048,4**
			6 611,7	980,6			15,3		53,0		20,2	777,1											8 457,9
			1 946,8	*0,0*			*0,0*					*0,0*											1 946,8
			11 457,0	1 224,5	897,7		22,9		144,7		163,0	853,1											14 762,9
			4 090,8	257,8	217,7		5,1		94,5		48,5	113,2											4 827,6
			1 820 000	**379**																			1 820 379
			170 000	94,8																			170 095